The Evaluation of Research in the UK and Japan

by

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A thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy in Continuing Education

University of Warwick, Department of Continuing Education

September 2001

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Acknowledgements

I would like to express my sincere gratitude to my supervisor, Professor Malcolm Tight, for providing lots of guidance and for showing the understanding and patience throughout this arduous journey.

At the same time, I would not have been able to fulfil my goal without the support of Professor Hideyuki Shinkai, Professor of Continuing Education, Nagoya University.

I would also like to warmly thank Ms Ruth Coles for encouraging me a lot throughout the period of writing up.

My thanks also go to Mr Howard Fisher, who originally suggested Warwick for my study.

I would also like to note that this research was partly funded by the Japan Foundation Endowment Committee in Sheffield.

Lastly, I would like to take this opportunity to say 'thank you' to all those involved in my project and to all those who kept supporting me a lot throughout my studying period.

Declaration

This thesis is presented in accordance with the regulations for the degree of Doctor of Philosophy (Ph.D.). The work described is entirely original and my own, unless otherwise stated. None of the material contained hereafter has been submitted for a degree at any other university.

Summary

Most industrial countries have introduced a system of evaluation in the HE sector during the last two decades. Although the experience in each country is different, recent studies show that many countries have faced similar confusion and problems with regard to the application of evaluation.

This study examines the validity of the present systems of evaluation for research in the UK and Japan, based on in-depth consideration of the factors behind the emergence of evaluation, political developments, policymakers' views, academic debates and institutional reactions in both nations. As an example of a response to the government's initiative, one case study in each country is undertaken, Warwick University in Britain and Nagoya University in Japan. Each case is analysed at three levels: institutional, departmental and individual. Some elements of the systems are then recontexualised in a comparative perspective, involving the analysis of background factors, development of the systems, details of the mechanisms and their impacts. An improved system of evaluation is suggested for each country.

It is argued that evaluation intrinsically is an unseen but extremely powerful instrument. It has the dynamic force to be able to alter the original nature of all of those involved. When it is applied to academic research in the university, therefore, its effects could be immeasurable. Hence, it should be treated with prudent deliberation before implementation. It is pointed out that the current systems of research assessment in the UK and Japan have both produced a number of unintended effects, and both nations have not yet been successful in establishing a system which can judge quality appropriately.

The study suggests that more serious consideration of the nature of 'evaluation' and its application to research will be required before developing further the present systems adopted in both countries. This should be backed by sufficient research studies on 'evaluation'.

Abbreviations

ABRC	Advisory Board for the Research Councils
ACARD	Advisory Council for Applied Research and Development
CVCP	Committees of Vice Chancellors and Principals
DENI	Department of Education, Northern Ireland
DES	Department of Education and Science
DfEE	Department for Education and Employment
DFES	Department for Education and Skills
EPSRC	Engineering and Physical Science Research Council
FCs	Funding Councils
FHE Act	Further and Higher Education Act 1992
GR funds	Generic Research Funds
HE	Higher Education
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
HEIs	Higher Education Institutions
JUAA	Japanese University Accreditation Association
NACSIS	National Centre for Science Information Systems
NIAD	National Institution for University Evaluation and Academic Degrees (Formerly called National Institution for Academic Degrees)
PIs	Performance Indicators
QAA	Quality Assurance Agency
QR funds	Quality-related Research Funds
RAE	Research Assessment Exercise
RIHE	Research Institute for Higher Education
SERC	Science and Engineering Research Council
SHEFC	Scottish Higher Education Funding Council
SRC	Science Research Council
UFC	University Funding Council
UCAS	Universities and Colleges Admission Service
UGC	University Grants Committee
US	United States
WW II	World War Second

Chapter 1 Introduction

1-1 Introduction

Evaluation is a powerful instrument which evokes strong discourses. Its demand arises from a multitude of factors in society. It has the possibility of changing the original nature of all involved and the context which applies. When it relates to academic research in the university, its effects can be immense, not only on the nature of academic research itself, but also on the whole higher education sector and beyond. Hence, it has to be treated with deliberate consideration before implementation.

Most industrial countries have introduced a system of evaluation in the Higher Education (HE) sector during the last two decades (though it was introduced much earlier in the case of countries in North America). Although each country had its own reasons for introducing the system, recent studies show that many countries have faced similar confusion and problems with regard to its application, regardless of differences of the details in their systems. This is because, while the demand for evaluation increasingly rises, most nations have not fully realised its powerful nature which could influence a variety of elements surrounding the system. A number of researchers have begun to focus on this issue in recent years. However, none of them has reached any definite conclusion, due to its complex features.

This study intends to elucidate the effectiveness of the present systems of evaluation for research by examining the British and Japanese systems introduced in recent years, based on in-depth analysis of the emergence of evaluation, political

developments, policymakers' views and academics' reactions in both nations. In the end, an improved system of evaluation is suggested for each country. As a matter of fact, the two countries have a variety of different social norms and practices which could be a hindrance in making the comparison. Nevertheless, it is worthwhile comparing them, since there are some interesting elements which the two nations share, such as the fact that both are based on small islands which are of similar size and population.

The rest of this chapter briefly illustrates the general background to the issues in both countries in order to clarify the circumstances in which the quest for evaluation has emerged, followed by key questions and an outline of the thesis.

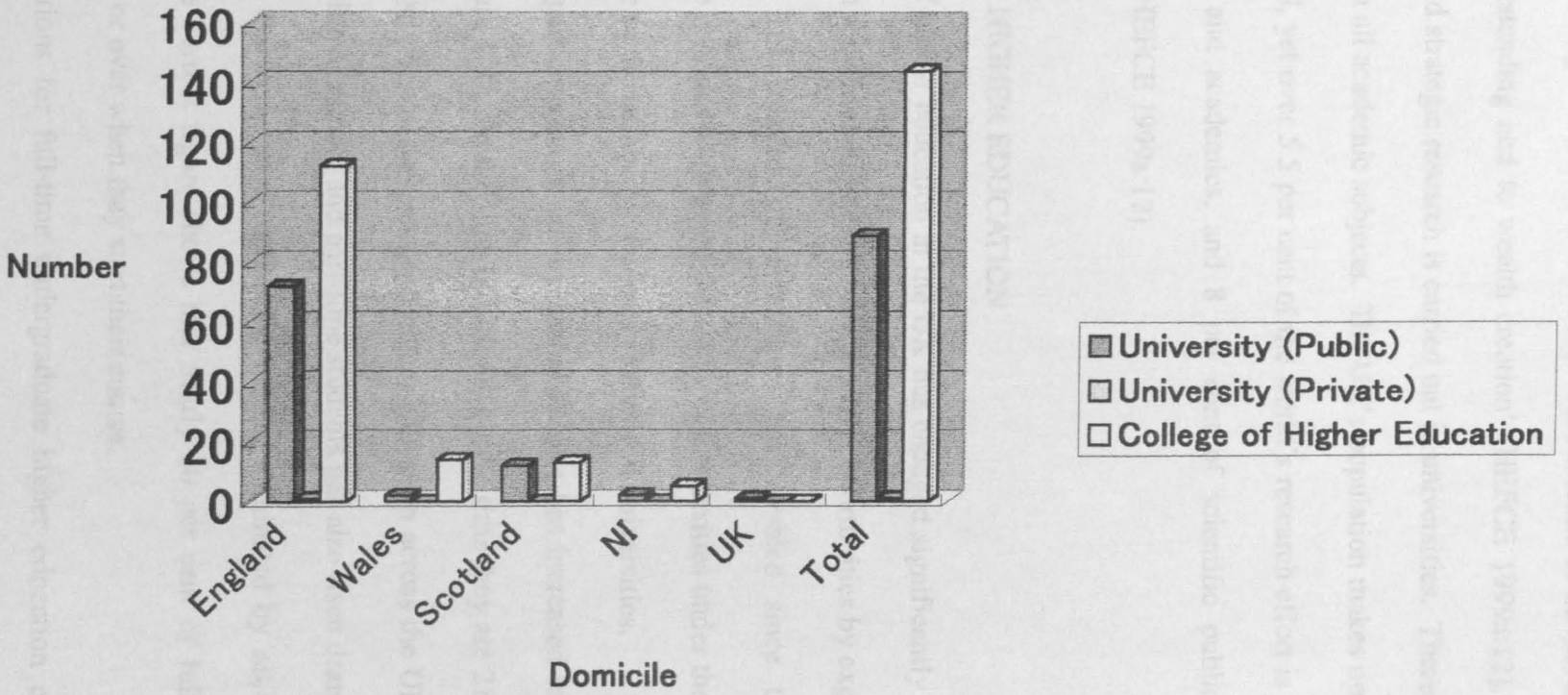
1-2 The System of Higher Education in the UK

THE NATURE OF THE RESPONSIBLE SECTOR

The UK universities are diverse, ranging in size, mission, subject mix and history. Their structures of governance have evolved in many ways, reflecting these backgrounds. There are 111 university institutions in the UK (England 87, Wales 9, Scotland 13, Northern Ireland 2) and 60 higher education colleges (England 47, Wales 4, Scotland 7, Northern Ireland 2) [Figure 1-1]. All UK universities with the exception of Buckingham (a private institution) are legally independent corporate institutions and receive significant public funding [CVCP 1998a:1].

The most important constitutional difference is between those universities created before and those after, the Further and Higher Education Act of 1992 (FHE Act). In England, the older universities were established by Royal Charter or statute [HEFCE 1999a:3]. The Privy Council has the power to grant university status to an institution which has the necessary characteristics, and universities have their own degree-awarding powers.

Figure 1-1 Number of HEIs in the UK by Type and Domicile



Source: HEFCE (1999a), p.3.

Most academic staff in most universities and in some colleges, carry out research as well as teaching. Research in the UK is 'fundamental to the development of knowledge and understanding and to wealth creation' [HEFCE 1999a:12]. Much of Britain's long-term and strategic research is carried out in universities. There is a strong tradition of research in all academic subjects. The UK's population makes up only 1 per cent of the global total, yet over 5.5 per cent of the world's research effort is carried out by British scientists and academics, and 8 per cent of scientific publications are published in the UK [HEFCE 1999a:12].

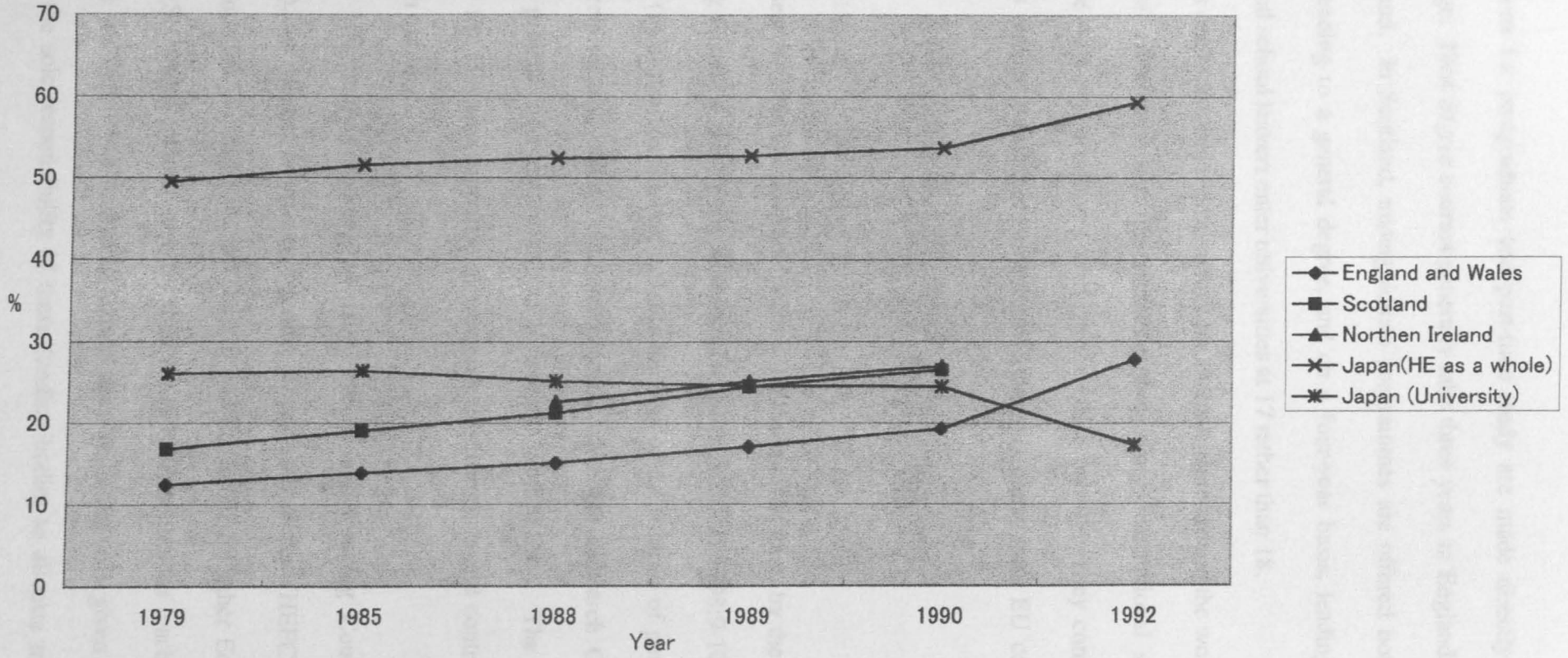
DEVELOPMENT OF HIGHER EDUCATION

The nature of higher education in the UK has changed significantly in the past 30 years, during which the nation has begun to widen HE opportunities by expanding the existing provision. The number of universities has doubled since the former polytechnics and some colleges were given the status of universities under the FHE Act, resulting in an increase in the number of students studying at universities.

The level of participation in HE by school leavers has increased rapidly over the past 15 years [Figure 1-2]. At the time of writing, by the time they are 21 years old, 33 per cent of young people will have entered higher education across the UK [HEFCE 1999a:8]. The proportion of mature and part-time students has also risen dramatically in the 1990s. Although undergraduates used to be largely dominated by school leavers studying full-time, the current figure shows that nearly 30 per cent of full-time first degree students are 21 or over when they start their course.

Most applications for full-time undergraduate higher education courses are made through the Universities and Colleges Admission Service (UCAS) [HEFCE 1999a:9]. Applications are usually made in the autumn, a year before the start of the

Figure 1-2 Age Participation Indices (API) by Domicile in the UK and Japan (percentages)



Source: Government Statistical Service (1993), p.76.
RIHE (1995), p.19.

course. Applications for postgraduate and part-time study are made directly to the university or college. First degree courses generally take three years in England, Wales and Northern Ireland. In Scotland, undergraduate programmes are offered both on a three-year basis, leading to a general degree, and on a four-year basis, leading to an Honours degree, and school leavers enter universities at 17 rather than 18.

The UK is one of the major destinations for students from around the world. As well as the cultural enrichment and understanding they bring, international students annually contribute well over a billion pounds to the UK economy. They come from over 180 countries and forty-four per cent of these students come from EU countries [CVCP 1998b:1].

FUNDING

Public research funds are provided under a dual support system, by the Higher Education Funding Councils and by the Research Councils [HEFCE 1998:9-10]. The Funding Councils (FCs) provide funding towards the cost of the salaries of permanent academic staff, premises and central computing costs, while the Research Councils provide for direct project costs and contribute to indirect project costs. The general funds provided by the FCs also support basic research in institutions and contribute to the cost of research training.

The four UK funding bodies - the Higher Education Funding Council for England (HEFCE), the Higher Education Funding Council for Wales (HEFCW), the Department of Education, Northern Ireland (DENI) and the Scottish Higher Education Funding Council (SHEFC) - allocate most of their funds by formulae for teaching and research [HEFCE 1999a:6]. Although guidance and priorities are given by the government, it is the sole responsibility of these funding bodies to allocate money to

specific institutions. With the exception of DENI, the FCs act as intermediaries between the government and higher education institutions (HEIs). As well as allocating funds to institutions, they provide advice and guidance to the government and promote good practice in the HE sector.

With regard to research, nearly all funding for research is related directly to the quality and volume of research. For instance, the HEFCE's funding for research in 1998/99 is 824 million pounds and is allocated to two main headings: quality-related research (QR) funds which account for 804M pounds and generic research (GR) funds for 20M pounds [HEFCE 1998:10]. In allocating the QR money, the total funds are divided between 68 subject areas (in the case of the RAE 2001). Each subject is assigned to one of three cost weights (high cost laboratory and clinical subjects 1.7, intermediate cost subjects 1.3, others 1.0) and each of them is multiplied by the volume of research to work out the total funding for that subject.

The quality of research is assessed by peer review in a periodic Research Assessment Exercise (RAE) [HEFCE 1998:15]. By this system, most HEFCE research funds are distributed selectively to HEIs that have demonstrated their strength in research by reference to national and international standards. According to measurement scales described through grades 5* (highest) to 1 (lowest), institutions conducting the best research receive a larger proportion of the grant.

Universities and colleges also generate funds from a wide variety of private sources, such as sponsorship, fee-paying students, conferences and donations, while being funded by industry and charity. In recent years, the government has shifted the balance of funding into competitive money. With this trend, it is predicted that HEIs will have to bid for more and more public funds than ever before.

RECENT TRENDS

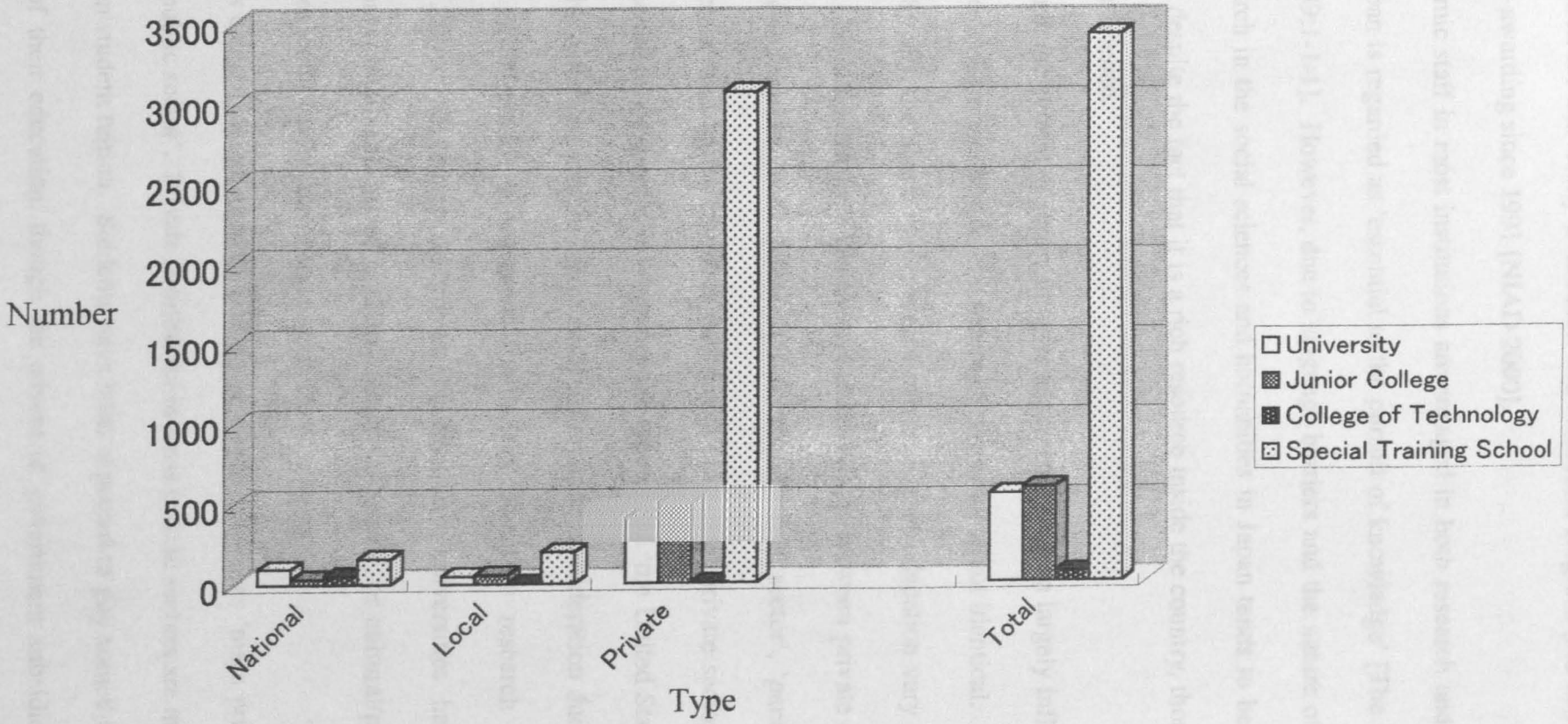
The main issues currently discussed in the UK include the question of 'Who should pay?'. Due to continuous financial stringency, the government announced in 1997 that new UK and EU undergraduate students on full-time higher education would make a means-tested contribution to university tuition fees from 1998 as part of a new student funding package [CVCP 1998c:1]. In this scheme, while maintenance grants were abolished, students will have access to a new loans scheme, repaid after graduation, depending on their earnings. One of the criticisms of this scheme is that the unprecedented expansion in student numbers over the last decade has not been matched with increased funding by the government.

1-3 The System of Higher Education in Japan

THE NATURE OF THE RESPONSIBLE SECTOR

Japanese higher education varies quite significantly, depending on the constitutional type (national, local and private) and on the nature of the institutions (general universities, single-subject based universities, junior colleges, colleges of technology and special training schools). Their structures of governance are diverse, reflecting these backgrounds, sizes and mission statements. According to the recent statistics [Research Institute for Higher Education 1995:148], there were 552 university institutions (national 98, local 48, private 406), 593 junior colleges (national 36, local 56, private 501), 62 colleges of technology (national 54, local 5, private 3) and 3431 special training schools (national 161, local 198, private 3072) in Japan in 1994 [Figure 1-3]. Since the end of World War Second (WW II), all universities have been accredited by the Japanese University Accreditation Association (JUAA) and each of the universities has its own degree-awarding powers. In the non-university sector, the

Figure 1-3 Number of Japanese HEIs by Type



Source: RIHE (1995), p.149.

National Institution for University Evaluation and Academic Degrees (NIAD) has taken a role in degree-awarding since 1991 [NIAD 2000].

Academic staff in most institutions are engaged in both research and teaching. Research in Japan is regarded as 'essential to the pursuit of knowledge' [The Academic Committee 1999:1-1-1]. However, due to language barriers and the nature of research, academic research in the social sciences and humanities in Japan tends to be closed to outside nations despite the fact that it is a rich resource inside the country, though this is less the case for science.

Although the system of Japan's higher education had been largely influenced by the United States (US) since WW II, the nature of the sector is not identical. According to Geiger [1988:699], the nature and forms of private higher education vary depending on the country. He suggests three basic structural divisions between private and public sectors of higher education: 'mass private and restricted public sector', 'parallel public and private sectors' and 'comprehensive public and peripheral private sectors'. Apart from these three models, Geiger also identifies the type called 'the United States private sector', since the American private sector deserves separate consideration due to its size and nature, e.g. large-scale government funding of scientific research in private universities. Above all, American private colleges and universities have a tacit obligation to provide advantages of academic quality, services, or cultural/pedagogical style that are not readily available in state institutions.

In this categorisation, Japan's HE sector can be placed as 'mass private sector and restricted public sector'. Private institutions in mass private sectors are most heavily dependent upon student tuition. Students have been expected to pay something close to the full cost of their education, though the advent of government subsidies in Japan altered this to an extent [Geiger 1988:699]. This tuition dependence inherently limits the

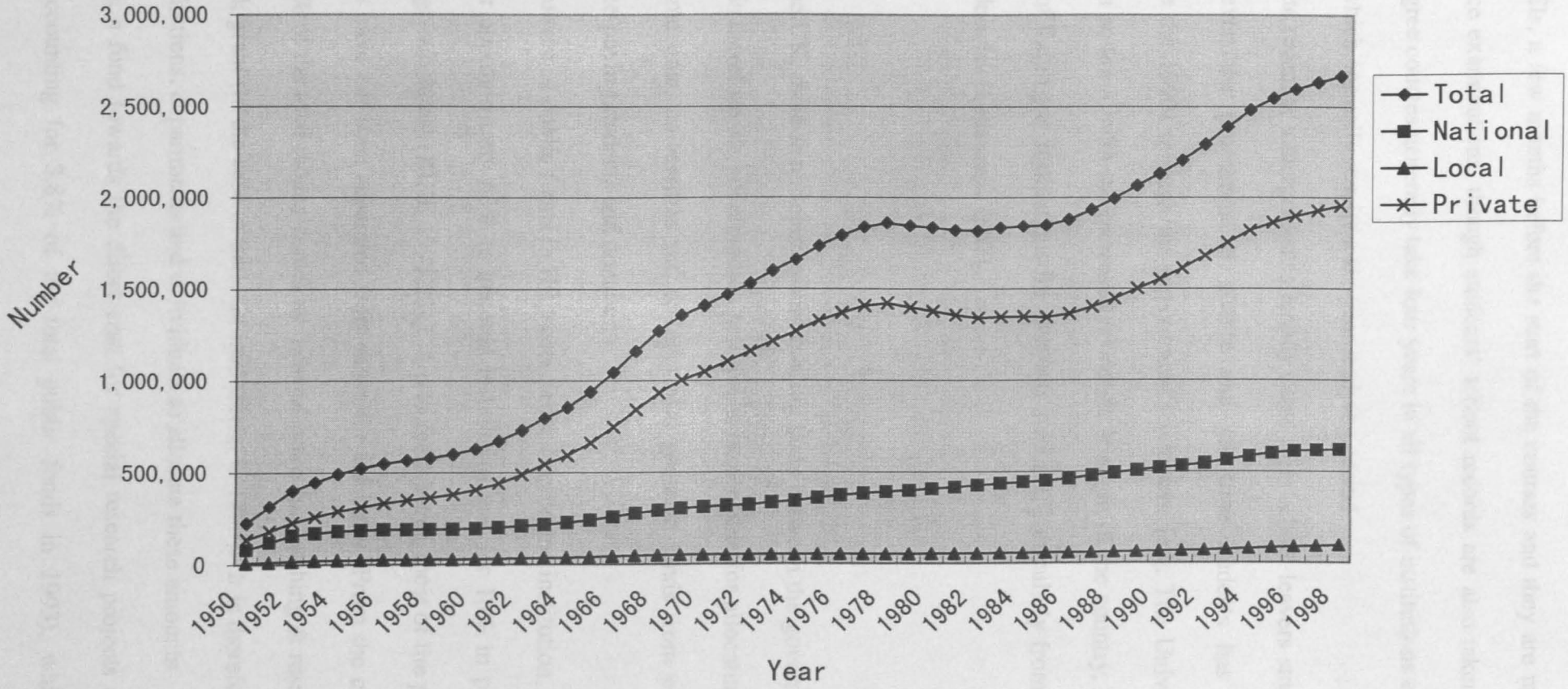
capacity of the educational services that private universities can provide. For instance, Japan's large-scale scientific research is mostly conducted in national universities (alongside private companies' research institutes), not in private ones. Consequently, though 'the bulk of higher education is catered for privately, the prestige institutions tend to be public ones' [El-Agraa & Ichii 1985:1]. In this sense, the Japanese public sector provides education that is functionally equivalent to that offered in the private sector in the US.

DEVELOPMENT OF HIGHER EDUCATION

In Asia, the impact of Western academic models and institutions has been significant from the beginning and it remains important even at present [Altbach 1994]. Japan was influenced by a variety of foreign ideas after the Meiji Restoration in 1868. The German impact had been the greatest until the US mission restructured the whole Japanese educational system after WWII [Osaki 1997:151]. Though Japanese universities emerged in the late 19th century, which was far later than any other Western country, the rate of participation in HE rapidly increased with the growth of HEIs post-war. Consequently, the nation has suddenly become one of the countries which has mass HE provision [Figure 1-4]. For instance, the level of participation of full-time equivalent students in HE is nearly 45.2% across Japan in 1995. This is also supported by the fact that more than 95% of the age cohort between 15-18 go through upper-secondary education. Although the nation encountered a sharp decline of the 18-year old population, this has not affected the enrolment rates as yet. It is now anticipated that the student participation rate in universities will be 50% within the early 2000s [Hosoi 1999:6].

Most applications for all higher education courses at all levels are made directly

Figure 1-4 Full-time equivalent student numbers in Japan



Source: Ichikawa (1995a), pp.15-16.

to each of the HEIs, a few months before the start of the courses and they are mainly judged by entrance examinations, though students' school records are also taken into account. First degree courses generally take four years in all types of institutions except medical schools which normally require a six-year studying period.

Until quite recently, undergraduates largely came from school leavers studying full-time. However, the proportion of mature and part-time students has risen dramatically since the 1990s through the government's initiative [e.g. The University Council 1993]. In addition, with the increased economic strength of the country, Japan is becoming one of the major destinations for overseas students, particularly from Asia over the last two decades [Umakoshi 1997].

FUNDING

Unlike the UK, there is no intermediate funding body between the government and the HEIs. It is therefore the government itself that is responsible for allocating HE funds. At the same time, universities and colleges also generate funds from private sources, such as fee-paying students and donations.

The proportion of public funds in HE varies depending on the institution, but it would account for approximately 60% in national institutions and for 10% in private institutions (through subsidies) [RIHE 1995:231]. Up to the present, most of the public funds for research have not been separated from those for teaching. From the central government, 77.2% of the total money comes as 'general funds for teaching & research' as a part of a block grant (in the case of national institutions in 1993). It is therefore up to each of the institutions, departments and individuals to allocate these amounts. Apart from this, there is a fund towards the direct cost for special research projects called 'Grants-in-aid' (accounting for 3.8% of the total public funds in 1993), which is

provided depending on the originality of the individual's or the group's theme and the prior research performance [Kobayashi 1997:45]. Until the mid-1980s, 'Grants-in-aid' had been relatively small, and there was hardly any external income in most HEIs [Kobayashi 1997:45]. However, they have been encouraged to seek external sources in recent years.

Latterly, due to financial constraints, selective distribution of research money through quality assurance has become a particular focus of the nation [e.g. The University Council 1998; The Academic Committee 1999]. Although under the current system, HE funding has not been linked to the quality of research (nor teaching) as yet, it is expected that, with the new nationwide third party system which is currently under preparation, the outcome will partly result in selective funding.

RECENT TRENDS

These include an increase in mature students' enrolment, the abolition of general education, the introduction of quality assurance, the introduction of independent graduate schools, the expansion of existing graduate schools, an increase in collaboration in cross-over subject areas and further focus on 'centres of excellence' through the introduction of selective funding.

With regard to national universities, all institutions are expected to be given an incorporated status under a new regulation within a few years, with a view to an increase of state funds to HE, an expansion of institutional autonomy, and more disclosure of internal information to the public [*Asahi Newspaper* 21/9/01]. In the new system, the national universities will have more freedom in their activities, released from the existing rigid control by the government. In accordance, a further cut in general staff is expected, while more efficient management will be promoted, e.g. flexible determination

of the tuition fees. Currently, detailed proposals on the incorporation of national universities have been announced by the National University Committee which consists of representatives of each of the national universities, covering issues such as the introduction of competency-based salary for staff, more flexible management in each of the HEIs through the rationalisation of existing administration and through the invitation of external viewers [*Asahi Newspaper* 1/6/01].

1-4 Key Questions

A more specific description of the HE sector in Britain and Japan would find a number of different elements which can be obstacles to a comparative analysis. However, both nations have undoubtedly experienced the emergence of quality assurance over the last two decades in their own contexts. Therefore, it can be envisaged that there are some possibilities for a comparative study which are worth tackling.

Among all the issues of quality assurance debated in both nations, this study particularly focuses on the evaluation of research. The reasons for this are:

a) space for the thesis is limited;
b) teaching assessment is more controversial in many respects under the present circumstances; and
c) the nature of academic research intrinsically embodies a number of universal values across national borders.

With this in mind, the study intends to answer the following questions:

- Why have the systems of research assessment been required and how have those been implemented in the UK and Japan?

- What are the characteristics of the methodologies adopted in both nations, and what are their implications?
- How have the systems of research assessment in the UK and Japan impacted on the HE sector and beyond?
- How should the university identify its role in response to social changes?
- What can be deduced from the UK and Japan in order to suggest an improved system of research assessment for each country?

1-5 Outline of This Research

Chapter 2 clarifies some possibilities and limitations of comparative analysis of higher education in the UK and Japan in general. It discusses methodological issues in comparative higher education, followed by a literature review of Anglo-Japanese comparative studies, analysis of the gap between Western perceptions of Japanese education and Japanese perceptions of Western education, and consideration of the possibilities for comparison at the present stage. The methods adopted in this research are also discussed.

Chapter 3 illustrates the evolution of the system of research assessment in the UK in connection with background issues and recent political debates. It examines the view of the Funding Councils and academic debates.

Chapter 4 depicts the practice of one UK university as an example of institutional reaction to the introduction of a system of research assessment and its implications. Reactions at Warwick University are analysed at three different levels: institutional, departmental and individual. After discussing the experience of institutional management, two selected departments' experiences are illustrated, one science and one non-science. These two departments are further investigated at an

individual level.

Chapter 5 explores the evolution of national policy on research assessment in Japan in association with the recent political debates and the implementation of assessment systems. It will review academic discussions as well as the views of a Japanese government official in order to clarify current concerns on the issue both in the government and the academic community.

Chapter 6 describes the practice of Nagoya University as an example of an institutional reaction to the government policies on university assessment in Japan. As in the previous chapter, this is examined at three levels: institutional, departmental and individual, covering both science and non-science disciplines.

Chapter 7 conducts a comparative analysis on the systems of research assessment in the UK and Japan, whilst discussing the issue in a wider context. The analysis involves various aspects of the topic such as background factors, development of the systems, details of the mechanisms and their impacts, so that the characteristics can be more distinctly drawn.

Chapter 8 concludes this study, suggesting an improved system of research assessment for each country, whilst referring to the limitations of this research as well as to feasible suggestions for future related research.

Chapter 2 Methodology

2-1 Introduction

As briefly shown in the previous Chapter, the systems of higher education in Britain and Japan vary to a large extent. This chapter attempts to clarify some of the possibilities and limitations of comparative analysis of higher education in the UK and Japan. It discusses methodological issues in comparative higher education, followed by a literature review of Anglo-Japanese comparative studies, and analysis of the gap between Western perceptions of Japanese education and Japanese perceptions of Western education, in order to draw out the possibilities for comparison. It concludes by describing the methods adopted in this research, while considering their limitations.

2-2 Potential and Limitations of Cross-National Studies

The demand for making comparisons between nations has been dramatically increasing, as globalization and regional co-operation among nations grows [Harris 1991:154]. It originates in different kinds of both external and internal forces, including 'the export and import of social, cultural and economic manifestations across national borders' [Øyen 1990:1]. It is usually motivated by 'the need to borrow, advise, evaluate and the curiosity-motivated need to find out and describe practices from other cultures' [Evans, Behrens, Hoffmann, Saxby-Smith & Rudd 2000:1]. According to Crossley & Broadfoot [1992:106], there is considerable agreement in the literature over the purposes of comparative and international studies:

1) contributing to a better understanding of oneself;

2) identifying and analysing similarities and differences in educational systems, processes and outcomes with a view to assisting in the solution of identified problems and/or in the future development of educational policy and practice; and
3) helping to better understand the nature of the relationships between education and the broader social, political and economic sectors of society.

In addition, Teune [1990:38] says that comparing countries can be a way of understanding the best forms of political organisation to realise 'general values' across the globe.

In practice, however, cross-national analysis has experienced a period of stagnation [Dogan & Kazancigil 1994:41]. The most conspicuous problem concerns the issue of equivalence. According to Neuman [1991:411-412], this can be divided into four subtypes:

1) lexicon equivalence (the correct translation of words and phrases);
2) contextual equivalence (the correct application of terms or concepts in different social or historical contexts);
3) conceptual equivalence (the ability to use the same concept across divergent cultures or historical eras); and
4) measurement equivalence (measuring the same concept in different settings).

One needs also to be aware of *Galton's problem* which concerns the question of how much of the characteristics of a specific culture are due to its own autonomous dynamics and how much to diffusion from other cultures [Goedegebuure & Van Vught 1996:379].

Generally speaking, it is broadly agreed among social scientists in the West that 'comparison is a fundamental aspect of cognition, and much research procedure codifies

and formalises that cognitive process' [Bechhofer & Paterson 2000:3]. In this sense, 'all empirical social research involves comparison of some sort' [Ragin 1987:1] and most problems that arise in cross-national comparisons are by no means peculiar to international research.

However, what is specific to comparative studies at the international level is that the gap between those compared is much wider and more deeply rooted in different social, cultural and political contexts. On this point, Hantrais & Mangen write that 'additional difficulties arise, which may be absent from single-nation studies, due to differences in research traditions and administrative structures' [1996:5] and as a result, it 'demands greater compromises in methods than a single country focus' [1996:10]. Himmelstrand [1977:437] also notes that cross-national comparisons have to intersect 'the lines between different schools of thought, different sociological traditions' and require 'a much broader range of competence and technological equipment' than one will usually find within one country. In addition, cross-national comparative researchers will need to consider 'the use and application of the data collected which are much less often encountered in academic research within one country where the scientific community has attained a certain level of autonomy which makes it possible to carry out so-called pure research for its own sake without too disturbing questions about applications' [Himmelstrand 1977:437]. Focusing on the relationship of those compared, Samuel [1985:8] explains that 'the comparative method consists essentially of observing the relationship - based either on similarities and differences - between two or more societal processes in the field of social sciences, and in hypothesising that this relationship can be observed between other social processes, known to a varying extent to be taking place at different times and/or in different places'. Therefore, without sufficient consideration of these points, comparative studies could lead to ethnographic

bias both in research focus and execution, since 'each culture has its own assumptions, modes of thought, orientation toward time and fundamental values about human life and all these influence their thinking and social relations' [Neuman 1991:409].

Furthermore, a few technical limitations can be pointed out. First, the limited number of sampling cases caused by empirical constraints can create 'doubts about representation and validity' [Holt & Turner 1970:19]. Second, comparative studies are more costly and more time consuming. Consequently, there is a tendency that preference is given to 'available data and methodological tools, and the leaning towards accessible networks and easy funding' [Øyen 1990:15].

In order to avoid all these possibilities, it is suggested by some authors that comparative studies should be conducted by an international collaborative research team, as this allows discourse on cases and variables to develop into extended dialogues between ideas and evidence. However, this approach tends to be vulnerable due to, among other things, 'a heterogeneity of schools of thoughts, spiralling costs and different work styles' [Teichler 1996:431].

On the whole, despite the common denominator of 'comparative', comparisons very often are 'a second-order element at best', and the vast majority of studies do not go beyond the descriptive stage, or at best do so only marginally [Goedegebuure & Van Vught 1996:390]. Hence, it is suggested that researchers need to acknowledge such bias derived from comparative studies and constantly combat it by being aware of how their own culture influences thinking, and by becoming familiar with a diverse range of cultures.

With regard to higher education, some authors have discussed the validity of comparative studies. It is often said that research on higher education is an object-focussed area based on a broad range of disciplines, and should not be seen as an

individual discipline with its own theories [Holt & Turner 1970; Teune 1990]. Indeed, it is undertaken not only by HE researchers but also by academics and practitioners in various fields. This means that 'their disciplinary contribution tend to be that of field knowledge not that of constituting the theories and methods of higher education research' [Teichler 1996:439]. Due to this diverse nature and lack of settled methodologies, comparative studies in higher education often become 'stuck in the collection of curious, minute details', tend to provide 'sketchy, incomplete knowledge, and seems to lack theoretical and methodological rigour' [Teichler 1996:432]. In contrast, if 'projects seem to be theoretically and methodologically well prepared, there is a tendency to limit their views to so few phenomena that they do not pay sufficient attention to the complexity of the different national systems addressed' [Teichler 1996:432]. Consequently, comparative studies in higher education are 'always being attacked for, or are self-defensive about, their inadequacies' [Kogan 1996:395].

Is it then possible to do more than provide a descriptive review of similarities and differences? Teichler [1996:462-463] writes that 'information on other higher education systems is most fruitful in destroying conceptual thinking and reasoning based on narrow experience; comparative research is a gold mine for the early stage of conceptual restructuring'. He concludes that 'comparative research projects seem to be theoretically and methodologically most promising if they are based on a semi-structured research design'. A group led by Kogan [1996:395-402], for instance, has conducted a comparative study in a British-Norwegian-Swedish project which involved empirical work into the relationship of policies to the impacts on academics by examining in-depth the working life of academics in the three countries. Their project is based on an assumption that the comparative method does not only consist of testing pre-established hypotheses but it can be used as 'a mode of locating and exploring a

phenomenon as yet insufficiently understood'.

Holt & Turner [1970:20], on the other hand, write that scholars have to focus more explicitly on the rules of interpretation and the criteria for admissible explanation, then they will have a more solid intellectual base for developing more sophisticated conceptual schemes and more appropriate data-processing routines. In practice, for example, Andorka [1990:205] suggests that comparative studies require social indicators derived from social statistics and from repeated sociological surveys such as those focusing on economic development, income differences by socio-economic strata, income inequality, social mobility and the openness of society, time, budget and way of life, and mortality.

More specifically, a recent study [Evans, Behrens, Hoffmann, Saxby-Smith & Rudd [2000:3-4] proposes a 'layered approach', which involves 'matching' of cases and categories at different levels, with data collection and analysis. It is assumed that by using this approach, together with the consideration of labour market features and cultural dimensions, there is a possibility that comparative studies could go beyond investigation of hypothesised similarities and differences to develop deeper understanding of how and why systems and policies operate in the ways they do.

Thus, if all these elements are carefully considered, hopefully by acquiring appropriate 'training and some understanding of the sensitive characteristics of cross-national studies' [Crossley & Broadfoot 1992:110], it is then possible to 'gain a greater awareness and a deeper understanding of social reality' [Hantrais & Mangen 1996:2].

Adopting some of the suggestions discussed above, the following sections will examine the possibilities of conducting a comparative study in the UK and Japan. They will deal with more specific issues arising from each of the national contexts in order to deduce the most appropriate methods for comparing these countries.

2-3 Discernible Gaps between Western and Japanese Perceptions

Before discussing practical comparability between Britain and Japan, this section illustrates noticeable differences between Western perspectives of Japanese higher education and vice versa. Though some scholars in both nations try to understand each other, some discernible gaps between their perspectives are still observed. The section includes four different views: Western perspectives on Japanese materials available in Japan, Western perspectives on Japanese higher education available in English, Japanese perspectives on Japanese higher education available in English and Japanese, and Japanese perspectives on UK higher education available in Japanese.

WESTERN PERSPECTIVES ON JAPANESE MATERIALS AVAILABLE IN JAPAN

In general terms, Japanese materials only reachable in Japan are often characterised by their 'exclusivity'. For instance, the French documentalist on Japanese information, Haon [1999:59] expresses enormous difficulties in approaching the society, since she has to understand 'not only the language but also the Japanese way of thinking'. She explains by drawing an example of her experience in working within the Ministère de la Défense:

> My relations with NACSIS (National Centre for Science Information Systems in Tokyo) has been my biggest failure in Japan. I have tried so many times to show my great interest, and the importance of having access to this database in France. I have even been officially asked by the French 'Ministère de la Recherche' to introduce the NACSIS database in France after evaluation. None of my arguments seemed to have any effect on the NACSIS position in making the information accessible. Sometimes I

> just regret that right from the beginning it was not said "This is not for you, don't touch it" just as is said to a kid who wants a candy. Because the only explanation for me, if this can be a sort of an *explanation*, is that "The policy of NACSIS was no exportation of the documentation" at that time. But they did not want it to be so clear.

The difficulty she encounters in this example, later explained in detail, is caused by different ways of showing 'politeness' in communication between France and Japan. Referring to the Japanese academic world in particular, the American journalist, Hall [1998:l] has pointed out its character:

> It is one of the great anomalies about present-day Japan that having learned so much from the outside world, its intellectual institutions - including media, universities, law and scientific laboratories - remain so closed to meaningful participation by non-Japanese... In the case of universities, although Japan is filled with copious enrichment of their academic disciplines, it excludes most academic materials from overseas.

As for academic materials written in Japanese, however, Phillifent [1999:147], the British librarian within the Library of Japanese Science and Technology in Northumberland shows scepticism on their qualities and necessities:

> At the end of the 20th century, Japan stands as one of the world's largest producers of sci-tech publications, especially periodicals. These materials represent a very important corpus of scientific knowledge, but unfortunately because of its great complexity it is still not fully recognized or utilized in the West... Japanese scientific periodicals can be said to suffer from an 'image problem' and not all of this can be laid at the door of

> language. It was claimed in the past - and some maintain it is still so - that Japanese sci-tech publications were hard or impossible to acquire... are they all necessary? Format/size, foreign 'entryists', re-publishing... Are many Japanese technical periodicals 'real' periodicals or something else?

As a solution, what he suggests is:

1) Learned societies need to publish journals which have less 'waste paper'.

2) Societies should try to refrain from publishing 'journals within journals'.

3) Fewer 'memorial' publications unless such items can be really justified.

4) Eliminating or at least reducing page charges.

5) Making it absolutely clear exactly what the publication is.

Focusing on the characteristics of Japanese academics in general, Altbach [1994:2-3] attributes these characters of exclusivity to the fact that almost all the work produced in Japanese institutions is written in Japanese not in English. He also questions Japanese academics' proficiency in English and its frequent use among the community. He suggests that Japan, as one of the largest producers of the world knowledge on science and technology, should contribute to the world network of creating 'knowledge' by presenting their work directly in English more, as well as speeding up translating their work into English.

WESTERN PERSPECTIVES ON JAPANESE HIGHER EDUCATION

Generally speaking, studies on Japanese higher education in the West have been treated as a part of Japanese Studies. Most descriptions of Japanese higher education include its typical characteristics, e.g. competition for admission to the most prestigious

universities [Cummings 1980:280; Duke 1986:177; Howarth 1991:12; Stephens 1991:147; Whitburn 1995:347], value of educational background [Lynn 1988:47; Teichler 1992:289; Cummings 1980:281], the relationships between higher education and employment [Rohlen 1998:28; Burn 1971:233; Teichler 1992:285-286; Howarth 1991:14; Duke 1986:185; Joseph 1993:218; Cummings 1980:28l; Kerr 1986], purpose of university studies [Rohlen 1998:28; Joseph 1993:218], the range of quality in teaching and research including the issues of 'lack of creativity' [Lewis & Ramon 1992; HMI 1991:15; Duke 1986:175; Cummings 1980:280], excellence in achievement [Tobin 1986:62; Whitburn 1995:348; Stephens 1991:159]. On the other hand, limitations in comparing Japan with other Western countries are pointed out, due to substantive lack of the amount of information on Japan [Tobin 1986:272]. Consequently, most parts of their work cannot fail to include culture-bound assumptions and a narrowness of focus, and cannot fail to be of 'a polemical nature' [Goodman 1989:8].

In recent years, however, several scholars have dealt with Japan in their comparative higher education studies in detail [Clark 1983; Cummings 1994; Teichler 1997], as Japanese education is focused on by the rest of the world. Teichler, for example, discusses whether the existing picture of Japanese HE is too old-fashioned and too much of a stereotype. He gives three reasons for reconsideration [1997:276]:

1) the number of publications in Western languages aiming to provide a broad overview remained small, and of the many interesting comprehensive books on Japanese higher education few written by Japanese scholars have been translated into Western languages;
2) there is an abundance of occasional observations on Japanese higher education which might be thorough and intriguing, but are often sketchy and occasional; and
3) higher education in Japan was already similarly characterised even one or two

decades ago, therefore, one should ask whether these characteristics have remained more or less stable over time or whether there is a tendency to overlook major dynamics and recent issues.

With regard to British works on Japanese education in particular, Goodman [1989:10] indicates that there is a tendency that they 'have always seemed to reflect more closely the political views of individual authors':

> Lynn's book (1988), for example, is clearly a creed for Thatcherite reforms. He picks out and concentrates on those elements of the 'successful' Japanese system that concur with his ideas on what needs to be instituted in Britain. It is no coincidence that his book was co-published by a Conservative 'think tank'. In similar vein, Howarth (1990) uses as a model the 'successful' Japanese system in order to highlight what he believes are the weaknesses and failures of these same Thatcherite educational reforms. While Lynn and Howarth clearly come from opposite ends of the political spectrum, both are indulging in the same intellectual process of setting up the Japanese educational system as a 'strawman' or 'idealised model' off which to bounce their own ideas and beliefs [Goodman 1991:165].

Therefore, Goodman says that there is no necessity for them to examine the Japanese educational system thoroughly because of the 'merits' they perceive in it. In his view, 'the Japanese system is only used as a strawman and not as a serious model from which the West could learn' [Goodman 1991:166].

On the whole, the amount of information on Japanese higher education presented by Western authors has not comprehensively covered all the issues and tended to be out of date, while in some cases being used for different purposes.

JAPANESE PERSPECTIVES OF JAPANESE HIGHER EDUCATION AVAILABLE IN ENGLISH AND JAPANESE

Some Japanese authors have contributed to the Western academic world by publishing their work in English. In terms of higher education, their work can most noticeably be found in *Higher Education*, and the current focuses include: the comprehensive study of the University of the Air in Japan [Muta 1985; Muta & Sakamoto 1989; Saito & Muta 1994; Saito & Muta 1998]; policy issues [Muta 1988; Kitamura 1997], gender issues [Amano, M 1997; Habu 2000] and technical revolution [Kobayashi 1980]. However, there is a tendency that most of the topics chosen in their articles are relatively marginal within the society and not widely argued at present. Its edition Vol.34, No2, September 1997, for example, completely focuses on Japanese HE written mostly by Japanese authors, except for Teichler's article giving a view from outside.

Although this recent publication covers a variety of topics, some of which are very topical even within the society (e.g. research functions, university administration), it still tends to ignore some controversial issues within the country. This is because all of these articles are written simply as an introduction to Japanese HE, rather than interpreting internal controversial issues. On the whole, it is said that 'very little research has been published on Japanese higher education in the West, so that literature on which to build is sparse, and explanations for why, what they experience and how they react are few and far between' [Habu 2000:46].

More specifically, there are two tendencies in the English materials on Japanese education written by Japanese authors. One is that Japanese authors who live outside Japan refer only to those which are available in the West, and do not cover academic

materials written in Japanese as well, since it is difficult to gain access to Japanese materials. The other is that those who belong to Japanese institutions frequently use Japanese materials written by Japanese authors, whilst not comprehensively examining English materials written by English and Japanese authors who live outside the country. As a consequence, what is available on Japanese education written by Japanese authors in the West is confined to particular aspects of all the issues discussed within the country, and each piece of work available in English tends to disregard some heated discussions taking place at a distance. What is missing in those materials written in English but widely discussed within Japan includes: contemporary drastic university reform, incorporation of national universities and new requirements in their management, effectiveness of the present systems of evaluation, co-operation between institutions and so forth. Meanwhile, from a Western viewpoint, Teichler expresses his view on recent studies on Japanese higher education conducted by Japanese authors, 'efforts directed towards reforming higher education have been spread over many issues, rather than focussing on single major issues such as steering, governance and evaluation as one observes in Europe during the last ten years or so' [1997:275].

JAPANESE PERSPECTIVES OF UK HIGHER EDUCATION AVAILABLE IN JAPANESE

Generally speaking, Japanese scholars have a great interest in the British educational system, and a number of researchers have tried to interpret some aspects of UK education for the Japanese academic communities. However, despite their great efforts to interpret the UK education system in Japan, mis-perceptions of UK education can from time to time be seen in some Japanese materials written by Japanese authors, due to the incorrect translation of particular key words and/or lack of knowledge,

resulting in sketchy and narrative descriptions. For instance, *IDE Contemporary Higher Education*, a monthly journal of higher education available in Japan devotes its 1997 No.385 edition entirely to UK higher education. However, most of their work is confined to political aspects of the issue, and not all the discussions by British researchers have been introduced.

As to the issue of research assessment, a few articles have introduced the British mechanism in detail and discussed some of its implications [Murata 1997; Yasuhara 1998; Tachi 1998], though most articles describe only the RAE guideline, and do not give sufficient attention to its implications.

Considering all these aspects, there are still discernible gaps between Western perspectives of Japanese education and vice versa, and no serious attempts have been made to fill the gap in perceptions, though Ichikawa [1986], for instance, has examined the validity of American perspectives of Japanese education from a Japanese viewpoint, clarifying distinctive features of US views of Japanese education and the accuracy of their perceptions.

2-4 Approaches towards Anglo-Japanese Studies

In achieving an appropriate comparison between Britain and Japan, the basic ground has to be clarified. With regard to this, Ishida [1974:139], for instance, writes that both nations 'should study each other's civilisations, considering all the data they possess' which are publicly available. Goodman [1991:166] also reminds us that 'accounts of other education systems are not produced in an intellectual vacuum but in an historical, political and cultural context'. This section, therefore, explores the possibilities of appropriate comparison between Britain and Japan from historical, social

and political perspectives, including an examination of Anglo-Japanese comparative works attempted by British and Japanese scholars. Some cultural considerations follow in the next section.

HISTORICAL CONTEXT

Historically, Britain went through 'modernisation' in the late 19th century, much earlier than Japan. In fact, the UK had long been one of the model Western countries from which Japan had earnestly acquired ideas for their own practical lessons. In order to become a 'modern' nation, for example, a mission was dispatched to Britain, while various British experts were invited to Japan during the Meiji Era (1868-1912). Yet, this attitude was later shifted by an upsurge of national consciousness, self-realisation and cultural pride [Jansen 1965:88].

Several authors focus on this aspect, particularly showing an interest in the fact that Japan could modernise without losing its national identity under the flood of headlong Westernization [Shively 1970:3]. Not only in education, but also in many other public and private services, Japan carefully looked at British systems as well as other Western systems in many respects. This phenomenon, even after the nation had economically reached the level of industrial countries by the 1970s, can still be widely seen in contemporary Japan, particularly among Japanese academics and government officials. For example, missions have been sent to a number of Western countries in the process of policymaking of all kinds even at the present day. This passionate Japanese attitude has eventually resulted in the fact that the attempt of comparison between Western countries and Japan in general has been more widely conducted by the Japanese side.

In addition, as Japan had politically long been committed to the US since the

end of WW II, a number of American-Japanese collaborations have been undertaken between the two nations. Examples include a joint study set up by Prime Minister Nakasone and President Reagan for a comparison of Japanese and American education systems [Goodman 1991:164]. In general, compared to the US-Japanese comparative studies [e.g. Kitamura 1986], less Anglo-Japanese comparative work can be found. Yet, some noticeable work has been undertaken by both British and Japanese researchers on their contemporary educational reforms [e.g. Horio & Simon 1987; The Daiwa Anglo-Japanese Foundation 2000]. In respect of higher education, for instance, 'the UK-Japan Education Forum' was held by both scholars in Kyoto in September 1999, focusing on the role of the university in the 21st century. However, these interactions tend to be confined to the introduction of their own systems and the exchange of their views and ideas, though some implications derived from them might be useful for future comparisons of the two countries.

SOCIAL CONTEXT

According to the statistics presented by the World Bank [2001], in 1999, Britain had a population of 59.5 millions in an area of 241.6 square km. In the same year, Japan had a population of 126.6 millions and its land size was about 376.5 square km. Obviously, Britain is approximately two-thirds the size of Japan, and the population density per square km is 246.2 thousands in the UK and 336.2 thousands in Japan. In both countries, urban areas are densely populated (% of the total population: 89% in Britain and 79% in Japan), and life expectancies at birth are relatively high (77 in Britain and 81 in Japan). Both countries' poverty rates are nearly zero and there are no external debts or resources flows from any international agencies. In 1999, the national GDP (billions of US dollar) was 1,441.8 in Britain and 4,346.9 in Japan. Regarding the

structure of economy (% of GDP in 1998), Britain has a service economy (72.9) with industry (26), and agriculture (1.1) is less important. Similarly in Japan, the figures are service (62.3), industry (36.0) and agriculture (1.7). Although in both countries, industry is the second major force in the economic structure, one of the main differences between Britain and Japan is while manufacturing industry is dominant (23.5 of the 36.0) in Japan, this is not the case in Britain. In terms of education, gross primary enrolment (% of school-age population) is 116 in Britain and 101 in Japan, implying that literacy rates are high.

From a socio-political perspective, the main difference lies in social stratification. While Japan is often characterised by its egalitarian structure and meritorious elements, Britain is historically a class-ridden country and shows 'little inclination to remove social barriers in the present day' [Howarth 1991:9]. For example, Shimizu [1996:88] says that, while the Japanese system functions not only to create a small number of elite but also to create a well-qualified labour force by providing equal opportunity to all citizens, British education has tended to play a role in reinforcing the existing social hierarchy. Indeed, one of the conspicuous differences is the age participation rate in upper-secondary education, as shown in Chapter 1. It is also pointed out that 'so much British effort is put into channelling people into relatively narrow specialist education in order to enter relatively specific occupational roles as technical specialists from which they seek a relatively early escape', whilst in Japan, with the influence of American education, general education is stressed from primary to upper-secondary education, as known for its high standard of basic education [McCormick 1993:347]. Furthermore, with regard to the extent of employee mobility, this is distinguished as a 'market-oriented' system in Britain and an 'organisation-oriented' system in Japan [McCormick 1993:329]. The different nature of societies can also be

explained as one based on individualism and the other group-oriented. Therefore, without considering these different elements, 'little of the Japanese system would adapt easily to British society without fundamental changes' [Goodman 1991:166] in its whole cultural and social fabric and vice versa.

POLITICAL CONTEXT

Several attempts have been made to explore some possibilities of comparison, focusing on political reforms including education in the 1980s. Such reforms are derived from both internal and external forces [Suzuki 1993]. One of the major external factors was undoubtedly 'the economic depression in the West and the global trade problems of the past decade', resulting in 'a major re-evaluation of the world economic and political structure' by introducing free market forces based on competition in the public sector [Goodman 1989:7]. On the other hand, internal common factors include 'a major political shift in many Western countries (and to some extent Japan and Korea) away from the popular post-war promotion of egalitarianism and social justice towards a firmer, politically and economically led, individualism or elitism' [Goodman 1989:8]. Besides, one of the most powerful internal forces behind the calls for educational reform in both countries were some of the business leaders, i.e. the Institute of Economic Affairs in Britain and the Federation of Economic Organisations in Japan [Suzuki 1993:101].

In the 1980s, new political ideology was introduced in both countries based on the 'New Right' and 'New Liberalism'. While the UK's New Right policy prompted a diminished state role and reiterated traditional nationalism e.g. respect for Victorian values, the policy was strongly promoted by de-regulation and de-centralisation in Japan [Inui 1998:6]. In introducing market-oriented ideas to the public sector, however, both

societies had realised that there was a controversy between the diminished role of the state and an increase in accountability in the public sector. The new market-led policy had also brought about issues such as transparency, equity, neutrality and the importance of having professional knowledge and specialised skills by public officials (servants) [Miyakoshi 1998:16].

However, there are several differences underlying the issue at the same time. In terms of education, recovery from WW II had led to a re-examination of the existing systems and reaffirmation of much of its traditional culture and history in Japan. Consequently, the country had realised clear gaps between what had been imposed by the US since WW II and what they would really require for its future, i.e. the need to develop their own educational identities [Suzuki 1993]. In English educational reform, on the other hand, 'great play had been made to present it as the response to public disquiet over the state of education' [Goodman 1989:18-19]. Some scholars also refer to several differences in the way in which both reforms have been implemented, e.g. in England there has been nothing which resembles the Ad-Hoc Council set up under the Cabinet in Japan, which takes an important role in political decision-making in Japan [Goodman 1989:22; Miyakoshi 1998:12].

Above all, particular attention is paid to the tendency to move in exactly the opposite direction; while Britain moved towards a model of greater centralisation, a National Curriculum and more testing, Japan was proposing to decentralise its system, diversify its curriculum and seek ways of reducing 'teaching to the test' [Goodman 1991:164-165; Suzuki 1993:99]. Suzuki writes that, as a country which had adored UK ideas for a long period, this opposite trend was to some degree 'bewildering' to Japanese academics and practitioners [Suzuki 1993:99-100].

Thus, although some obstacles still exist in comparing Britain and Japan, there seem to be some possibilities for a comparative study if one is engaged on a topic which the two countries have faced in the same period. For instance, both nations have encountered common issues to readjust their old-fashioned norms and practice and to reconsider their existing social structures throughout the decade of the 1980s [Kobayashi 1988:6]. As for higher education, general discussions that are commonly raised in the UK and Japan (and some other industrial countries as well) include: diminished state funding, who should pay?, impacts of technology, internationalisation, pressures on the academic profession, accountability and quality assurance. Above all, a large number of articles in both nations have been devoted to the issues surrounding 'evaluation', introduced in the HE sector in recent years, and this implies that the topic of this research has potential for a reasonable comparative study, if it is appropriately organised.

2-5 Methods of This Research

Taking all these factors into consideration, what are then the most appropriate methods to adopt in this research? As one of the best options for a comparative study, the case study approach can be adopted, since it 'allows the use of a variety of research methods' and above all 'it more or less encourages the use of multiple methods in order to capture the complex reality under scrutiny' [Denscombe 1998:39].

Other merits of using case studies are pointed out by several researchers:

- It would 'allow the researcher to deal with the subtleties and intricacies of complex social situations' [Denscombe 1998:39].
- It 'fosters the use of multiple sources of data' [Denscombe 1998:39].
- It 'is particularly suitable where the researcher has little control over events' [Denscombe 1998:40].

- It 'can fit in well with the needs of small-scale research through concentrating effort on one research site' [Denscombe 1998:40].
- It 'helps researchers connect the micro level, or the action of individual people to the macro level, or large-scale social structures and processes' [Neuman 1991:30].
- It 'is an appropriate research method when you are trying to attribute causal relationships and not just wanting to explore or describe a situation' [Yin 1993: 31].
- It forms 'a database for further refining both methodological and substantive issues' [Yin 1993:41].

However, weaknesses of this technique are also pointed out by some scholars, mostly with regard to generalizability [e.g. Ragin 1987:69; Bogdan & Biklen 1998:60; Bryman 2001:282-283; Naroll 1968:239-240]. Bryman [2001:283], for example, admits that 'a case study is not a sample of one drawn from a known population'. According to him, 'the findings of qualitative research are to generalise to theory rather than to populations' and 'it is the quality of the theoretical inferences that are made out of qualitative data that is crucial to the assessment of generalization' [Bryman 2001:283]. From a practical perspective, Silverman [2000:103] suggests the following to obtain generalizability:

- combining qualitative research with quantitative measures of populations;
- purpositive sampling guided by time and resources;
- theoretical sampling; and
- using an analytic model which assumes that generalizability is present in the existence of any case.

With this in mind, this research employs the case study technique, involving

interview and documentary analysis. It adopts an inductive 'layered' approach, and mainly deals with two levels of comparison:

1) At the national level as a macro level analysis;

2) At the organisational level as a meso and micro level analysis.

At the organisational level, one case study in each country is undertaken, Warwick University in Britain and Nagoya University in Japan. In selecting these examples, one can argue about their appropriateness, since the location of the research site 'will influence the kind of data that can be gathered' [Burgess 1982:76]. The main reason for choosing these institutions are that both universities are very innovative in their strategies towards institutional assessment which are worth describing as case studies, as well as the fact that both institutions allowed access. Though in a sense, these could be 'extreme instances' in the light of the nature of both institutions, i.e. both Warwick and Nagoya are highly ranked in their research profiles and relatively positive towards national policies, every effort was made to overcome problems of generalizability by referring to other examples revealed in journal articles and newspapers in order to maintain validity. Attention was also carefully paid to avoiding the problem of 'anecdotalism', exposed 'in the way in which research reports sometimes appeal to a few, telling examples of some apparent phenomenon, without any attempt to analyse less clear (or even contradictory) data' [Silverman 2000:10].

Starting with detailed descriptions of each country's experience, comparative analysis is conducted by re-contexualising the issues in their social, cultural and political context, as well as by reflecting on both cases from an international perspective. Analysis at the national level includes a number of materials, both published and unofficial documents, as well as interviews with policymakers in both countries. At the

organisational level, analysis is undertaken at the following three levels:

1) At the institutional level: collecting institutional publications and institutionally circulated documents as well as conducting individual interviews with institutional co-ordinators of research assessment in management sections;
2) At the departmental level: conducting individual interviews with co-ordinators of departmental research assessment as well as obtaining relevant internally circulated documents in two selected departments, one science and one non-science;
3) At an individual level: conducting interviews with 3-4 academics respectively in each department, which is used for the departmental analysis in both countries, in order to explore individual behaviours.

The total number of interviews is 27, though some of those interviewed at the departmental level were also requested to provide their personal views at an individual level. The distribution of the interviewees at each level is as follows:

	National	Institutional	Departmental	Individual
Britain	1	2	3	8
Japan	1	1	3	7

These figures exclude those who initially agreed to have exploratory meetings to allow access and those who gave some comments informally but did not wish to be involved.

With regard to the style of interview, one-to-one interviews are used because:

- It is relatively easy to obtain individuals' viewpoints.
- It is fairly straightforward for the researcher to locate specific ideas with specific people [Denscombe 1998:114].
- It is relatively easy to control [Denscombe 1998:114].

In fact, dealing with a sensitive topic, it would not be so easy to gain convincing comments in a group interview or by using the questionnaire technique, since 'where group members regard their opinions as contrary to prevailing opinion within the group, they might be inclined to keep quiet, or moderate their views somewhat' [Denscombe 1998:115].

At the institutional and departmental levels, the reason for approaching co-ordinators first is that, in this type of research, 'key informants not only provide detailed data on a particular research setting, but also provide the researcher with introductions to other informants and to other situations' [Burgess 1982:77]. Although in this research, interviews are conducted with a limited number of people, the findings are still meaningful if the overall aim is 'to delve in depth into a particular situation with a view to exploring the specifics' [Denscombe 1998:118-119].

In order to 'provide some back-up for the content of the interview' [Hantrais & Mangen 1996:11] as well as to 'cast some doubt on how seriously the interview data should be taken' [Denscombe 1998:133], this research also involves the examination of a large number of published and unpublished official documents, including governmental statistics, journals, newspapers, internets, etc. These are also used 'to reconstruct past events or ongoing processes that are not available for direct observation' [Lindlof 1995:208].

Strictly speaking, however, Desrosières [1996:17] notes that 'statistical products are dependent on the history, culture and administrative structures specific to each country and are far from being identical, despite the costly efforts made by statisticians to harmonise methods, questionnaires and nomenclatures'. Therefore, it is true that these international data bases 'can seldom satisfy the requirements of an in-

depth investigation' [Cseh-Szombathy 1985:56]. Nevertheless, it is worthwhile adopting documentary analysis in this study, since in Britain 'it remains the case that there is a wealth of statistical information which has already been rigorously collected, often very large samples, and which can be used by researchers' [Bechhofer & Paterson 2000:61] and this is also the case in Japan.

The specific research timetable was scheduled as follows. In the UK, the semi-structured interviews were conducted throughout September 1999 - April 2000. A dozen questions were prepared in advance, covering various aspects of academic life with regard to research assessment. Each interview took from 50 minutes to 135 minutes, and was recorded by both analogue tape and digital disk (MD) with the permission of each interviewee. The reason for adopting 'the semi-structured interview' is that it allows the interviewer 'to be flexible in terms of the order in which the topics are considered' and at the same time, it allows the interviewee to 'develop ideas and speak more widely' [Denscombe 1998:113] as well as to have 'a great deal of leeway in how to reply' [Bryman 2001:314].

The first meeting was with an institutional manager within Warwick University, and through his kind introduction, contact was made with the RAE Manager for national analysis a month later. Meanwhile, with the advice of a Warwick's manager and some academics, two departments were selected within Warwick, and approached through sending a letter to the departmental co-ordinators for the RAE in each of the departments in the first instance. After conducting interviews with the departmental co-ordinators for the RAE in each of the departments, the possibility of further interviews with a few members of academic staff was broached, and some members were suggested. Individual approaches were then started by sending a letter to each member of staff, and an e-mail was sent to each of those who responded to the letter to arrange a meeting.

In Japan, interviews were undertaken in July 1999 and again from December 1999 to January 2000. The contents were slightly altered in accordance with the nation's own circumstances, i.e. not all the questions were identical with those used in the UK. The process of approaching appropriate figures at different levels of the institution was nearly the same as undertaken in the UK. Each interview took approximately one to three hours, and some were followed by more informal conversations, which allowed for more inductive insights. The recording method was chosen at the time of each interview depending on the preference of individual informants, i.e. note-taking and/or digital-recording.

At each interview, the preference for anonymity was checked in order to give more valid insight, since in studying sensitive topics, 'interviews provide a means of getting beyond surface appearances and permit greater sensitivity to the meaning contexts surrounding informant utterances' [Lee 1993:104]. Consequently, since some informants have shown a wish for not being identified, most outcomes derived from the interviews including the names of the departments and the interviewees are anonymised to protect the confidentiality of their data. In addition, since the interviews were conducted in English in Britain and in Japanese in Japan, direct quotation is frequently used for British interviewees to illustrate their voices effectively, while some indirect quotation and interpretation are used for the Japanese interviews. For the latter, attention is carefully paid to keeping the meaning and purpose of the original, rather than its words or sentences, since 'the units of translation are not necessarily the same as the units of expression in the original language' [Hantrais & Ager 1985:33].

The recording method is, as stated above, slightly differentiated depending on the nation, i.e. all UK interviews are recorded digitally as well as analogically, while some Japanese interviews were recorded by note-taking only, despite the fact that there

was a possibility that 'a decision to take notes or to tape record significantly influences the nature of the social process of interviewing, in particular the generative power of the encounter' [Sanger 1996:64-65]. The main reason for this was that more caution was required in the Japanese interviews when broaching the issue of using the tape/digital recorder, since some informants have shown unwillingness to talk about any sensitive issue.

More fundamentally, however, the methods employed in this research contain inescapable limitations, particularly when it comes to interview techniques, since these have 'to apply the same standardised techniques of data collection and data analysis which are characteristic for the "non-comparative" surveys' regardless of its suitability [Nowak 1977:4]. Generally speaking, the interview is widely used among Western social scientists. For example, Blaxter, Hughes & Tight [1996:153] write that 'it can be a very useful technique for collecting data which would be unlikely to be accessible using techniques such as observation or questionnaires'. Ackroyd & Hughes [1981:70] also note that 'by using verbal reports offered by respondents, the investigator has access to an almost infinite variety of information that would be virtually impossible to gather by any other method'. Even compared to other methodological techniques, Sanger [1996:61] considers that 'the interview, even more than observation, is the predominant means of data gathering'. Yet, Bogdan & Biklen [1998:84] warn that 'individual interviews with strangers might be common in your world but in other places it may be unacceptable' and Japan is not exempt from this. Although the interview can be a useful technique in Japan, there seems to be a clear difference between Britain and Japan in interviewees' reactions, if treated under the same conditions. One of the noticeable facts apparent from the interviews is that, once UK interviewees start to speak, they tend to offer their comments as much as they can without any stimulation, whilst Japanese

interviewees, as they are originally not trained to speak much partly because of cultural reasons, tend to speak relatively less. The reason for this can be explained as follows.

Firstly, in Japanese society, oratory is not so much respected as it is in Europe. In comparison with the West where oratory has been regarded as an indispensable qualification for an intellectual, Ishida [1974:117] shows one characteristic of the Japanese:

> The natural sensibility of the Japanese placed value not on logicality but on illogicality or supra-rationality. Also, the Japanese do not emphasize the European logical premises which claim to classify and categorise objects. The Japanese mode of thought does not set up classifications and categories such as good and evil, self and other, subject and object, man and nature or life and death with which to structure concepts. Consequently, logic and rhetoric did not develop in Japan. The Japanese were not faced with the necessity of developing a Western type of logic or rhetoric. In an extremely endogamous society, understanding did not depend on talking. Instead, communication was possible through the shared Japanese understanding without words. In effect, the Japanese do not value rhetoric, or oratory that appeals to people by persuasion based on logical argument, or moving one's opponent with a show of eloquence.

In general, therefore, oratory is felt to be shallow and contemptible in Japan, and 'people tend to treat it condescendingly' [Egami 1989:419].

Secondly, in Japan, there is a distinctive and vague use of words in daily life which does not obey the rules of logic. For example, during the interviews conducted at Nagoya, the following behaviours were from time to time observed such as "(Being asked a question) Well, all I want to say is written in this report, so... (silence)" and/or

"Well, it is difficult to say but...(silence)". Thus, unless being motivated to speak more by sub-questions, their comments suddenly ended up with silence, though this was hardly observed during the UK interviews. As shown in this case, Japanese people often end their talk without expressing their feelings entirely, leaving the sentence imperfect [Shibagaki 1989:103]. According to Ishida [1974:88], they *unconsciously* speak unclearly, though they are linguistically capable of speaking better. This is because if they leave the sentence equivocal, they carry a lower risk of accidental exposure of the private self and a lesser risk of taking responsibility for it. Ishida says that, in taking this attitude, it is more convenient and comfortable to live in a group-oriented society and, furthermore, this way of speaking is very flexible and rich in diversity, because an answer can vary depending on listeners.

In a group-oriented society, it is always important to be conscious about how others would think before expressing one's own feelings, whilst trying to adjust her/his own opinion to those who are in the mainstream. Hence, attention always centres on overall perspectives, rather than personal opinion. Therefore even if one says "in my opinion...", the answer might express the general opinion, though unintentionally [Egami 1989:416].

Thirdly, the Japanese appear 'to cultivate greater reserve, and are more regulated and cautious in expressing themselves, and tend to prefer conventional communicative forms' [Barnlund 1975:64]. Shibagaki [1989:148] explains why the Japanese prefer to use perfunctory forms of communication:

> In a traditional rice-growing society, every procedure of agriculture had to be considered with natural phenomena, e.g. rain, wind, thunderstorm, dry land, and therefore people had to pray to God. Also in order to relax and make intervals, they

> need to undertake some form of ritual, and that was considered to be the only way to inform God of their job. In present days, all these past rituals have gone, but the form itself has remained.

Yet, this general tendency was less evident in this research, as all the Japanese interviewees were academics who are used to speaking logically in their daily lives. Consequently, the interviews in both countries were conducted smoothly without serious problems, though there were the following tendencies:

- At the national level, information was gained through both interviews and documents, though most materials obtained are confined to those available in public.
- At the institutional level, a good number of published and unpublished documents on institutional discussions were gained at Nagoya, in addition to the interviews. On the other hand, no access was allowed to obtain any confidential document used for institutional discussions at Warwick, though this was adequately covered by the interviews and published documents.
- At the departmental level, most information was gained through interviews in both departments at Warwick, as it was hard to obtain any unofficial document internally circulated within those departments. On the other hand, since it was easier to get access to internally circulated documents as well as published documents at Nagoya, the description was drawn from both interviews and documentary analysis.
- At an individual level, all data was obtained from individual interviews.

At each level, findings were carefully examined 'in relation to their wider societal context and with regard to the limitations of the original research parameters', while considering 'the dangers of cultural interference' [Hantrais & Mangen 1996:11].

MEANING OF THIS RESEARCH

As illustrated, there have been implicit and explicit barriers to a comparative study in Britain and Japan. However, by focussing on a specific aspect in common, i.e. research assessment in this study, some comparisons can be drawn. This research, though not being able to overcome all the limitations, intends to contribute to the Anglo-Japanese comparative studies in the following ways:

- Comparing the current experiences of the UK and Japan with regard to research assessment will add an important dimension to an understanding of contemporary Japanese society in the West, as well as to an understanding of contemporary British society in Japan.
- The purpose of presenting this thesis in English, since the study is partly based on a great deal of Japanese materials written by Japanese scholars as well as empirical data derived from case-studies in Japan, is that it could partly overcome a critique of the Japanese character of one-sided acquisition, and could be a chance to export Japan's original ideas to the rest of the world.
- Examining both systems of research assessment in an international context will give a clear picture of the merits and demerits of both systems as well as induce general principles, since international comparisons give a new sight on what has been taken for granted within national debates.
- Through conducting feasible comparative analysis based on empirical data derived from both documents and interviews at different levels in the UK and Japan, the study will identify the effectiveness of the present systems of research assessment in both nations, which could give a useful guide to improving the existing systems.

Chapter 3 Development of National Policy on the Evaluation of Research in the UK

3-1 Introduction

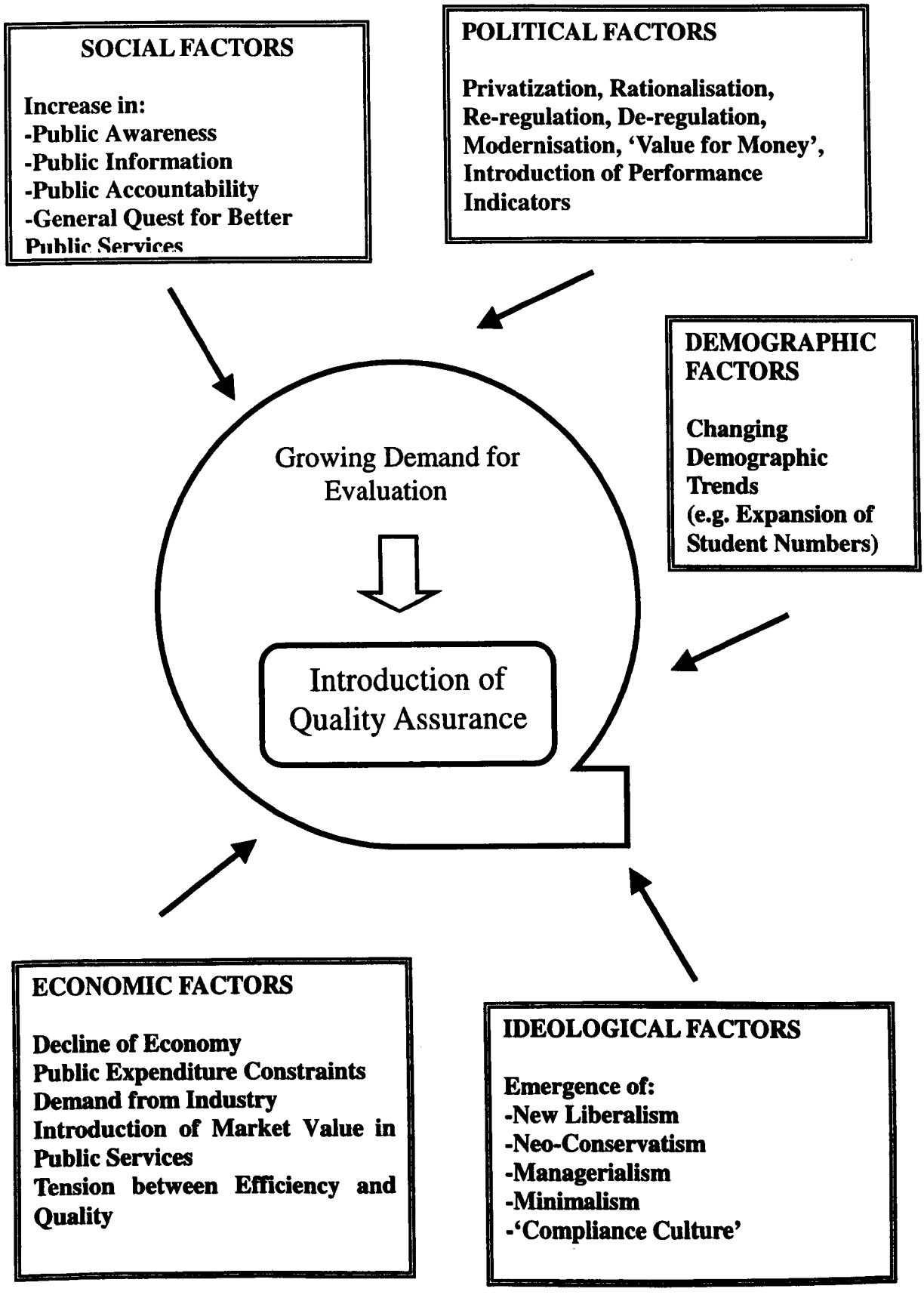
This chapter discusses the evolution of the system of research assessment in the UK, including background issues and recent political debates within central government. Thereafter, it examines academic debates over the issue, which is later contrasted with the view of the Funding Councils.

3-2 Background to the Issue

A multitude of factors have affected the development of the system in the UK [Figure 3-1], including political, economic, ideological, social and demographic. These elements interact to create the strong dynamics underlying the quest for quality assurance. Among these different factors, it is political elements that have been the most influential. Therefore, it is sensible to start by describing the development of the government's political initiative in connection with the socio-economic situation.

During the post-war period of 1945-1973, the British government had long been committed to a political doctrine, the so-called 'consensus politics', while in the economic sphere it largely trusted to Keynesianism, under which welfare provision dramatically improved, resulting in 'better housing, rising living standards and successive consumer booms' [Evans 1997:8-9]. However, towards the late 1960s, as the nation was encountering economic stagnation, it was gradually becoming hard to

Figure 3-1 Factors affecting the Emergence of Quality Assurance in the UK



continue this prosperity. In the 1970s, the British economy was 'the worst of any leading industrial nation' [Thatcher 1995:576], having suffered from hyperinflation, unemployment and decreasing international competitiveness derived from considerable weaknesses in the structure of the labour market and inadequacies in training and education by international standards [Riddell 1991:206-207; Reitan 1997:23-24]. Under these circumstances, although the nation tried to conduct 'repeated reassessments of the scale and distribution of public expenditure' [Pritchard 1994:254], the demand for public expenditure continued to grow. By this time, there was a growing recognition that the long-standing political doctrine known as 'consensus politics' was no longer effectual [Riddell 1991:6].

The trouble was clearly perceived by the Wilson-Callaghan Labour Government (1974-1979), and that eventually led to 'a shift away from collectivism towards individualism, at least in the economic sphere', with a greater emphasis on monetary and public spending restraint [Riddell 1991:216]. In this way, the social-democratic 'consensus politics' came to an end by the late 1970s, which inevitably created an opportunity for a new political leadership [Riddell 1991:13].

Although there had been 'considerable continuities with the past' in the redirection of macro-economic policy [Riddell 1991:206-207], the Conservative government, elected in 1979, introduced the so-called 'social market strategy', which intended to reduce public expenditure from the levels it had attained, 'not just to assist in the control of inflation, but to inject greater dynamism and incentives into the economy by making market forces harsher and taxation lower' [Gamble 1985:148-149]. One of the great advantages for the new government at this point was that 'it could pursue its monetarist experiment in a political climate in which the opinion had already shifted decisively towards monetarism as the necessary framework for controlling the impact of

the recession' [Gamble 1985:193].

Politically, so-called Thatcherism including beliefs such as capitalism, individualism, efficiency, personal reward and wealth creation represents 'the practical application of a set of theories, whose proponents are known as the 'New Right'' [Riddell 1991:4]. This theory was articulated by Sir Keith Joseph, with the intention of 'reduced functions by the state, sharp reductions in taxation and greater incentives for businessmen to chase markets' [Evans 1997:6]. Based upon this 'New Right' ideology, Margaret Thatcher advocated a number of drastic reforms throughout the 1980s.

Among the various tasks that the government had faced, Thatcher believed that 'economic requirements' came first [Thatcher 1995:569], since 'the economic crisis overwhelmed all other concerns' [Reitan 1997:33]. Her economic strategy mainly consists of the following elements:

1) to fight against inflation;

2) to bring Britain's public finances under control;

3) to promote private enterprise and ownership; and

4) to make markets work more efficiently, what has been called a 'supply side revolution' [Thatcher 1995:574-575].

The first two elements were tackled during her first ministry (1979-1983) by the introduction of a Medium Term Financial Strategy and the introduction of the 1981 Budget which set up 'a firm grip on public borrowing' [Thatcher 1995:571]. The third and fourth elements became major features of Thatcherism from her second ministry to the end (1984-1990) [Reitan 1997:59]. In order to enforce the third element, 'privatization' was carried out to shift the balance away from the state [Thatcher 1995:574], as she believed that it would bring both 'greater efficiency and widespread

consumer benefits' [Cowan 1987:8]. The last element, strong commitment to the market principle, required the modernisation of the public services, though in some cases this ideological and institutional direction had already been established by the previous governments [Pollitt 1990:81]. In Thatcher's view, these objectives were 'in varying degrees achieved' and each was 'valuable in its own right, not least as part of reducing the role of the state and giving people more control over their own lives' [Thatcher 1995:576].

In this way, the Conservative government in the 1980s first commended a reduction of the level of public expenditure, and later introduced privatization strategies and a market discipline into the fields that had been monopolized by the government. Under these circumstances, however, a new ideological hegemony had inevitably challenged many traditional norms and arrangements for the organization and delivery of public sector services which were broadly based on the previous social democratic principles of the welfare state.

Since the application of the market principle to the public sector, the government had begun to acknowledge that the 'market economy could only be maintained by strong state intervention' [Pritchard 1994:263]. This required Thatcher's Government to renew its existing ideological doctrine; it would have to explore the intellectual implications of moving from the 'pure' free-market concept to that of the 'managed' market [Pritchard 1994:264]. It is out of this climate that 'managerialism' was focused upon in order to compel 'a command economy' on the whole public sector [Harvey & Knight 1996:70]. With the advent of 'managerialism' or the so-called 'enterprise culture' [Riddell 1991:206], the public services were required to operate 'better management' as a method of a tighter control [Pollitt 1990:86].

It has been argued since the 1980s that the new managerial approaches lack

coherence in a number of important respects, e.g. in the motivational model of the public servant, the stance on wider social inequalities and the position on decentralization [Pollitt 1990:118]. Yet, these approaches were taken over and 'were widely extended' by Thatcher's successor, John Major [Reitan 1997:154]. With the change of the political leadership in 1997, Thatcherism ended, yet the new Labour government inherited Thatcherite reforms and has 'given them permanence' [Reitan 1997:207].

As is often pointed out, one of the positive results of Thatcherism, at least in the economic sphere was 'improved productivity', although the immediate effect was 'may be to shed jobs' [Thatcher 1995:578; Riddell 1991:205-206; Peters 1992:126]. On the other hand, as one of the consequences of Thatcherism, Britain saw an increased disparity between the winners and losers [Riddell 1991:218; Reitan 1997:167; Evans 1997:117] and became 'more divided, less secure and harsher' in many respects, while 'economically more competitive' [Riddell 1991:204]. Furthermore, Thatcherism resulted in 'more short-term successes than its detractors like to pretend' [Evans 1997:118].

It is mainly from this political context that quality assurance began to be debated. Yet, at the same time, some other factors have also contributed to the introduction of an assessment system in the public sector [Green, 1994:3-5; Pollitt 1990:72-73]. Firstly, the rising demographic trend since the 1970s [Evans 1997:120], together with the government's initiatives to improve productivity for efficiency and effectiveness, had made the public more critical about public expenditure in general [in't Veld 1991:21; Williams 1999:149]. This led to public authorities developing 'many procedures to increase the accountability of public organisations and/or subsidised institutions' [in't Veld 1991:21]. Secondly, the period saw a public 'mistrust' of professionals; the emergence of an awareness that they were often acting in their own

interests rather than those of the wider society [Barnett 1996:149; Henkel 1998:291]. Thirdly, the relative decline in the power of local government made it easier for the state to intervene in the public sector [Pollitt 1990:72-73].

3-3 Political Development of the Evaluation of Research

As with other public services, the government, with its market policy, expected universities 'to participate in the drive to make education and its institutions more business-like in their operations, to think strategically about mission and management and to reorder the hierarchy of decision-making about the efficient and effective use of resources' [Bargh, Scott & Smith 1996:42]. In fact, by 1987 the Department of Education and Science (DES) had abolished block grants to universities and replaced them with 'a system of contracting between institutions and the new planning and funding body' [DES 1987:31]. Moreover, with the introduction of market strategies, the government had begun to focus on 'the output of universities' more than ever before [Williams 1999:159], in order to make the universities 'more accountable, more responsive to the desires of planners and the demands of their clients, and more motivated to look for sources of finance other than public money' [Pritchard 1994:254-255]. Although the progress was not smooth, universities gradually began to adopt to these changing policies.

For many centuries, universities had been regarded as 'private foundations' in Britain, and it was only after WW II that central government funding began to 'account for more than half of their income' [Williams 1999:143]. The University Grants Committee (UGC) was regarded as being 'the ideal model of public funding of universities', since its system gave universities almost complete freedom in determining how to use their money, while protecting HE from 'the vagaries of the market' [Williams

1999:149]. The Research Councils, on the other hand, which had given additional funding if a project appeared, were worthy of development on a large scale. Thus, 'a tacit compromise between control and autonomy' remained in place with academia, so that academic freedom was maintained in theory at least, as the government had taken the view that 'the form of knowledge advancement and the production of well educated graduates' in HEIs was one of the 'returns' they legitimately expected [Bargh, Scott & Smith 1996:41].

More fundamentally, with regard to research, there was a principle established in the early period of the 20th century that Government should not seek to exercise control over research, and it was expected that 'a Ministry of Education would be concerned predominantly with the provision of education wherever, and by whomsoever, needed' [Haldane Report 1918:8]. This principle had, except during wartime, long been a commitment by the British government until the announcement of the report of the Trend Committee in 1963 [Shattock 1994:36].

Recommendations by the Trend Committee did not lie outside the scope of the Haldane principle. However, it drew attention to the costs consequent on the 'emergence of new and extremely expensive areas of scientific effort' [Trend Report 1963:10], which was hardly an issue during the first two decades of the post-war state. The Trend Committee also raised questions about the UGC's funding methods, which made 'no close supervision of funds allocated to universities' [Trend Report 1963:12]. It stated that 'the rapid advances of science gives rise to new and unpredictable developments, often calling for very expensive equipment, which are not easy to accommodate within the university quinquennial budgeting' [Trend Report 1963:27]. Since then, the debate on how the priorities of scientific research projects should be determined has intensified [SRC 1970:4].

During the session 1968-69, the Science Research Council (SRC), which was empowered by Royal Charter to encourage, carry out and support research and development in science and technology, commissioned a thorough review of all its activities and achievements in order to select the most effective means of exercising their power [SRC 1969]. As a result, the Council was convinced that 'it must make its support of research, whether pure or applied, more selective, both in relation to particular fields of science meriting concentrated attention and in the choice of the scientists responsible and the laboratories where they work' [SRC 1970:3]. At the same time, however, the Council perceived the inevitable consequence that 'when funds are short increased resources for certain selected areas must be balanced by decreases or slower growth rates elsewhere' [SRC 1970:3]. Therefore, the Council, while specifying its policy on selectivity, stated that 'some support will always be available to any outstanding individual in any part of any subject for work of sufficient "timeliness and promise"' [SRC 1970:9].

In these circumstances, the new Conservative government, elected in 1979, was particularly concerned about ensuring that the money available for research was focussed on the highest quality work. There were two different ways in which the government responded:

1) The Research Councils targeted their funding in accordance with specific policy project priorities;

2) The UGC developed mechanisms which would allow the government to identify the highest quality work so that funding could be conducted on that basis.

The latter was implemented in 1981 by imposing a cut in the UGC's recurrent expenditure to most universities. The UGC developed a database to cut universities'

funding differentially, ranging from 6 % to 44 %, using a series of indicators [Pollitt 1990:62]. It was from this point that performance indicators (PIs) became more important, although there were some debates on the applicability of PIs in the HE sector from the late 1970s [Pollitt 1990:61-62]. At this stage, however, it was left to universities to allocate their block grant as best they could, and the shift in resources by the UGC was far too small, compared with those adopted by the Research Councils, which had a much greater ability to be selective in the allocation of research grants and contracts.

Towards the mid-1980s, there had been 'growing discontent' within the government about the effectiveness of the university sector and its contribution to the national economy [Johnes & Taylor 1990:4]. Although a Joint Working Party of the Advisory Board for the Research Councils (ABRC) and the Advisory Council for Applied Research and Development (ACARD) was set up to examine the problem, both Councils could not come up with any real solution at first. It was realised that the time had been reached to decide upon not only on the areas of support but also on the locations in which research in any subject would take place [ABRC 1984:12].

A year later, the UGC showed its recognition of this by publishing a report *A Strategy for Higher Education into the 1990*, which announced its intention to adopt an explicit research selectivity policy in the allocation of recurrent grants within the university sector [UGC 1984:17]. By this time, the UGC's intervention in universities had been intensified by reviewing annually how universities exercised selectivity in their own resource allocation processes, as well as by requiring universities to submit formal academic plans for approval and complete financial forecasts for each of the next five years which identified the academic areas where savings were to be made [Shattock 1994:41]. Meanwhile, there was also widespread agreement among academic elites,

particularly in science, that the available research funds from the Research Councils were not sufficient to support all projects approved by the peer review system. Therefore, concentration of research resources in some form would have to be introduced [Jaques & Richardson 1985:11]. The principal question in the discussion was 'how to decide on research priorities when there is too little money to go round' [Henkel 1999:107].

It is from the mid-1980s that the government itself began to move the issue up the agenda [Bird 1994:79]. The government's Green Paper *The Development of Higher Education into the 1990s* clearly recognised that it would be vital for HE to contribute more effectively to the performance of the economy [DES 1985:3]. While stressing the importance of developing 'flexibility' to be able to respond to future change, the government stated that the HEIs need:

1) to be concerned with attitudes to the world outside higher education, and in particular to industry and commerce, and to beware of "anti-business" snobbery;

2) to go out to develop their links with industry and commerce; and

3) to build strong connections with their local communities [DES 1985:4].

In the meantime the Jarratt Committee, created by the Committee of Vice-Chancellors and Principals (CVCP) in order to inquire into the efficiency and effectiveness of universities, published a report which recommended that universities should work to clear objectives and seek greater value for money by developing a range of performance indicators, 'covering both inputs and outputs and designed for use both within individual universities and for making comparison between institutions' [Jarratt Report 1985:36]. The government welcomed the Jarratt Report's suggestions, as it was believed that there would be advantages in the regular publication of a range of unit

costs and other PIs by institution and by department, and that PIs would also be important for the internal management of institutions and for the development of a policy on the allocation of resources more generally [DES 1985:49]. Thus, the government's Green Paper and the Jarratt Report made clear the need to develop schemes for more efficient management of the university.

Later, the UGC, while foreshadowing 'a further decline in funding of 2 % per annum up to 1989', stressed its policy in its Circular Letter 22/85 that research PIs would be introduced and would result in the future allocation of research funds to becoming more selective in its support for research so as to maintain its quality and the strength of the dual support system as far as possible within the resources available. It was also argued in the Second Joint Report of the Chairmen of ACARD and ABRC that:

> It is becoming increasingly urgent to ensure that the investment made in the science base contributes more effectively to wealth creation. To achieve this the allocation of resources within the science base needs to take more account of economic potential, and links between the science base and industry need to be strengthened and extended [ACARD/ABRC 1986:1-2].

Hence, it was mainly from the soaring demand in science that the need for the selective funding system was clearly identified.

In 1986, the UGC announced the allocation of recurrent grants in accordance with its new selective formula. Consequently, its subject sub-committees were required to rate departments on the basis of their record in research and to publish their assessment in grading in terms of 'international standard', '(national) standard', 'above average', 'average' and 'below average'. This process eventually enabled the

government to advise on subject rationalisation more clearly. The main achievement of the 1986 exercise was that it not only distinguished research from teaching and other activities in evaluation, but also it emphasised the new concern for institutional management; the universities were asked to provide descriptions of the basis on which they allocated funds for research between departments. Another dramatic event was the publication of university research league tables in the quality press based on averaging the rating which each of the universities received in each of its subject units assessed.

After the exercise, the UGC conducted a series of subject reviews that would reinforce selectivity by, where necessary, concentrating expensive resources in fewer institutions. These reviews were intended to cover all subjects including non-sciences [Shattock 1994:67]. For this purpose, the UGC introduced a methodological innovation by establishing a two-stage review mechanism whereby the Review Committee, consisting of a group of senior and authoritative scientists in the field, produced a report. Following consultation with interested parties, the report was then considered as a second-stage exercise by the UGC National Committee with regional sub-committees which made recommendations to the full Committee. The first such review was implemented in earth sciences and the first stage of the review was published in May 1987. In this, the UGC encouraged the merger of earth science departments in order to concentrate a significant number of excellent pieces of work in one place. The method of review adopted in the 1986 exercise, however, eventually turned out to be impossible to maintain in terms of the cost, time, resources and space for interdisciplinary work.

At this point, it was clear that 'the freedom maintained by the application of the Haldane principle had to be regarded as superseded' [Shattock 1994:37]. Attention was therefore directed entirely towards research performance, and while a good deal of public interest centred on which universities received the most 'stars', the general impact

was to begin the process of identifying the premier research universities. This process was intensified by the publication of the ABRC report, *A Strategy for the Science Base* (1987), which suggested a stratification of universities into research (R), teaching (T) and mixed (X) institutions, considering financial constraints and the growing importance of large scale effort in many areas of experimental science [ABRC 1987:7]. Although this was criticised for its increasingly managerial approach and was rejected as being too inflexible by the House of Lords Select Committee and the Science and Engineering Research Council (SERC), it would seem that 'the general principle of selectivity was not going to be easily swept aside' [Henkel 1999:107]. The ABRC report also pointed out that 'the development of selectivity and more direct management can be seen as the inevitable response to the challenge of managing science' [ABRC 1987:4].

In accordance with these moves, the next exercise was conducted in 1989 under the succeeding funding body, the University Funding Council (UFC), which slightly improved its formula. A comprehensive list of research quality ratings (a new numerical 1-5 system) was published subject by subject for all UK universities. In the 1990s, under the auspices of the UFC, the 1992 exercise was conducted, followed by the 1996 exercise by the succeeding Higher Education Funding Councils. The 1992 exercise was formally named the 'Research Assessment Exercise' (RAE) and was followed up by RAEs in 1996 and 2001. Details of the system have been modified each time through consultation processes [Table 3-2].

Thus, the main quest for selective funding through the introduction of research assessment emerged from urgent scientific needs, triggered by severe financial constraints. However, one of the main problems was that, while no specific attention was paid to the non-scientific research, the system has been applied to all subject areas, and its effects remain largely unpredictable.

Table3-2: Development of the System of Research Assessment in the UK

	1986	1989	1992	1996	2001
Funding Bodies	UGC	UFC	UFC	HEFCs	HEFCs
Interval	N/A	3	3	4	5
Rating Scale	'international standard' 'standard', 'above average', 'average', and 'below average'	5,4,3,2,1	5,4,3,2,1	5*,5,4,3a,3b,2, 1	5*,5,4,3a,3b,2, 1
• Main Features and Changes	• The explicit background of a 2 per cent reduction in overall recurrent grant per annum. • A significant shift of power away from the subject committees. • The publication of university research league tables in the quality press based on averaging the rating a university received in each of its subject units assessed. • The distinction drawn between teaching, research and special institutional factors. • The selectivity criteria pointed firmly towards a more structured university system where ' the differentials were more to do with academic strengths than the kind of broader criteria.	• The UGC published a comprehensive list of research quality ratings, subject by subject, for all UK universities • The abandonment of descriptive ratings and their replacement by a numerical 1-5 system • The decision to involve professional bodies and subject associations more closely in the exercise, and to seek a wider and much more comprehensive set of research data. Although the purpose was financial, its criteria were wholly academic; publications, success in winning research grants, studentships and contracts, spread over 152 subject Units of Assessment, to be rated on the basis of 'informed peer review'.	• Reduction of UoAs (down from 152 to 72) and ranking them on a five point quality scale. • An invitation was extended to all higher education institutions including former polytechnics, Scottish Central Institutions and a range of colleges of higher education. • Not all academic staff in any unit needed to be included in the submission. • The conversion of quality gradings to funding allocations changed. • For some units of assessment two grades could be awarded, the second to give specific recognition to applied research.	• Extension of the period • The panels were to produce statements of their individual criteria for assessment, and some account of their working methods. • The number of publications produced by each active researcher within the assessment period was dropped. • The period over which these works could have been published was amended (from four years to six years in humanities and arts subjects) . • The provision for making separate assessments in the same subject in "basic/strategic" and in "applied" research was abolished. • Some changes in the subject coverage of the panels. • Electronic form using software was developed for submissions.	• Extension of the period • Umbrella groups were introduced in order to discuss areas of common concern to panels, and try to secure a degree of consistency across the panels and interdisciplinary subject areas. • In total membership of users, about 13% of panel members are drawn from user communities outside academics institutions. • The way in which panel members are appointed has developed (as a part of nomination process, the FCs consult a variety of organisations, anyone who has a legitimate interest in research in universities). • Overall, 20 % of the panel members are female.

3-4 Academic Debates

There is a vast amount of literature published which deals with the issue of evaluation in general. One of the noticeable features of research on this topic is that it has been discussed in a variety of fields, not only among researchers in education, but also among those in other fields of the sciences and beyond. It is therefore quite hard to capture the overall trends in research into this topic. Yet, there seem to be three main aspects underlying the discussion: studies on methodology, studies on its impact and studies on the political climate associated with the changing relationship between the state and universities. Although no particular attention is paid to the system of research assessment in a few articles, some implications can be observed with regard to it. This section, therefore, will summarise the main debates from these three aspects.

STUDIES ON METHODOLOGY

Applicability of the new managerial approach

The idea of the system originated in the need for selective funding in scientific research, and some authors discuss the applicability of the system in non-science subjects in the light of the nature of knowledge and the way it is produced [Jaques & Richardson 1985; Whiston 1992; O'Brien 1994]. Since 'academic knowledge is not a homogeneous form of output that can be easily compared across or even within disciplines' [O'Brien 1994:16], it is predicted that 'greater pluralism' needs to be introduced in the political framework at both governmental and institutional levels.

Several papers discuss whether or not a new funding arrangement has truly matched the reality of academic life [Craven, Dick, & Wood 1983; Smith 1987; Clayton 1988; Molinero 1989; Trilbe 1990; Walker & Wright 1990; Bird 1992; Johnes & Taylor 1992; Williams 1993; Mace 1993]. Most of them agree that more detailed discussion is

needed before decisions are taken. For instance, in order to examine the research ratings of cost centres in UK universities, Molinero [1989:22], by using a multidimensional scaling analysis, has revealed that 'the information disclosed by the UGC does not make it possible to produce a simple league table of universities', since only two dimensions are involved when explaining policy decisions. Using a statistical analysis, Johnes & Taylor [1992], on the other hand, reveal that disparities between subjects may result in inefficient allocations at the institutional level. They note that 'only size of cost centre is consistently associated with research selectively score' among eight factors incorporated into their statistical model [Johnes & Taylor 1992:67]. They also point out that research expenditure per member of staff is not strongly connected with the outcome of the rating [Johnes & Taylor 1992:84].

Moreover, some authors argue the applicability of managerial techniques in educational settings, referring to the changing role of academics and their critical reactions [Smith 1987; Sizer 1988; Barnett 1990; Tasker & Packham 1993; Pritchard 1994; Elton 1995; Bargh, Scott & Smith 1996; Francis 1999]. Most warn that 'the main educational objectives - the development and transmission of knowledge - will become subordinated to central prescriptions based on a financial value system' [Bargh, Scott & Smith 1996:29], as the system primarily assesses in terms of economy, efficiency and effectiveness.

Separate funding system for research and teaching

Another issue in connection with funding is the advisability of separate funding for research and teaching, including the importance of the close integration of these two activities within academic life [Elton 1986; Gray & Hoy 1989; Elton 1992; Trow 1994; Hughes & Tight 1995; Clark 1997; McNay 1997; Jenkins, Blackman, Lindsay & Paton-

Saltzberg 1998]. Whilst explaining how inextricably teaching and research are linked, many articles suggest that more detailed studies on the feasibility of what is proposed will be required before the implementation of the new scheme. For example, Trow [1994:22] warns that 'the further that policy retreats from the realities for which it is designed, the more distorted must be its effects'.

Validity of the panels' judgements

The discussion on this issue leads to reflections on the effectiveness of measurement. Many authors try to cover benefits and drawbacks derived from the use of the new technique and its implications [Ball & Halwachi 1987; Johnes 1988; Gillett 1989; Pollitt 1990; Sizer, Spee & Bormans 1992; Haslam, Bryman & Webb 1993; Bryman, Haslam & Webb 1994; Ball & Wilkinson 1994; Morrison, Magennis & Carey 1995]. Gillett [1989], for example, has examined the validity of indices of departmental research performance based on three different types of peer review (journal peer review, grant-giver peer review, impressionistic peer review), and found that indices based on grant-giver peer review and impressionistic peer review fail to satisfy the basic requirement of a performance indicator; 'they are incapable of providing the information that the UGC wishes to obtain in its 1989-90 evaluation, namely an indication of the cost-effectiveness of departmental research programmes' [Gillett 1989:37]. Arguing the pros and cons of the present techniques, Ball & Wilkinson [1994:417] suggest 'a change from the league table approach to one based on adopting indicators for each institution which are consistent with its mission'.

Quality debates

The adaptability of the present method is more widely discussed by focusing on

'quality', and a large number of articles are devoted to this idea, its definition, maintenance, theory and ethics [Barnett 1987; Moodie 1988; Cuthbert 1988; Church 1988; Rudd 1988; Weert 1990; Pollitt 1990; Harris 1990; Booth 1992; Field, Lovell, Sidhu & Weller 1992; Middlehurst 1992; Barnett 1992; Harvey & Green 1993; Harvey, Green & Burrows 1993; Green 1994; Doherty 1994; Fry 1995; Woodhouse 1995; Loveluck 1995; Woodhouse 1996; Margetson 1997; Soliman, I & Soliman, H 1997]. In comparison with the USA, Moodie [1988:5], for instance, says that in the UK, 'quality has been set alongside value for money as a political goal in HE', indicating that the public debate in Britain has lacked two other elements, discussion of curricular content and references to hard evidence about either the decline or maintenance of standards.

IMPACT STUDIES

The most comprehensive research into the impact of research assessment was undertaken by McNay [1997] in conjunction with the HEFCE with particular reference to the RAE 1992, disclosing impacts at four levels: system, institution, unit and individual. The project ran from July 1995 to July 1996 including:

1) a literature search;

2) four focus groups of, separately, senior academics and senior administrators to get perceptions of the issues and the main priorities within those as a basis for the questionnaire surveys;

3) development of strategy vignettes for some 32 varied institutions;

4) surveys within 15 institutions of heads of units and of academic staff; and

5) interviews with representatives of other key stakeholders in the research community - research council staff, employers, journal editors, professional bodies, academic associations.

The study confirmed that research was increasingly 'managed', and examined what that meant under three categories: policy and strategy, structures and processes [McNay 1997:36]. In addition, many of the impacts on institutional and individual behaviour were indicated, such as an increased awareness of the place of research and research performance among institution leaders, an element of playing the numbers game, the further development of team based research and the decline of the 'lone researcher', and the emergence of central research offices to support, monitor and inform the work of researchers.

Other researchers have identified the following issues:

Reinforcing hierarchy?

The most remarkable example of the impact of the RAE at the national level is its effect on the HE sector in the long-term, i.e. rationalising the stratification of universities and widening the gap between pre-1992 universities and post-1992 universities [Shattock 1994; Baimbridge 1996; McKenna 1996; Baimbridge 1998; Henkel 1999]. For instance, with evidence from a cross-sectional and longitudinal evaluation of the 1996 RAE, Baimbridge [1998:69] reveals that 'a clear difference remains evident between old and new universities with only one institution bridging the gap of the two sectors'.

Transforming organisational culture?

As a case study of the experience of a former Polytechnic, McVicar [1994], for example, illustrates how the RAE has provided a major shock to the previous culture. Harvey & Knight [1996:84] indicate that 'rather than a transformative research culture,

government policy has encouraged a compliance culture that has produced an over-reporting of underdeveloped research, with little transformative potential'.

Inter-disciplinary variations

Analysing the allocation procedure of HEFCE based on the RAE 1992, Johnston [1993:369] points out 'very considerable variability' between disciplines; some disciplines (Economics, Social History etc) were being relatively over-funded in the average university prior to 1986, whereas others (Pharmacology, Microbiology, Mineral and Mining Engineering etc) were relatively underfunded.

Correlation of department's scale

With regard to the correlation between the size of a department and its grading, it is often said that departmental size is of great importance, especially in science [e.g. Goddard 1999]. Contrary to the general perception, however, Hoare [1995:256] has proved, from an economic point of view, that size is less important than the inability of departments to achieve and that different universities vary substantially. According to Hoare [1995:256], the importance of departmental size 'is likely to be promulgated by some departments, in part as an excuse for their low rating and in part to justify their bidding for more resources on the basis of 'make us bigger and we'll do better''.

Negative impacts on individual activities

Impacts on individuals have been expressed in various respects. Firstly, the main concern often centres on negative impacts on research, e.g. the emergence of short-termism, an increase in premature publications, neglect of interdisciplinary work, as well as on teaching and other activities, e.g. neglect of teaching, the prevalence of the

academic transfer market and its implications [Sizer 1987; Mace 1993; Kingston 1997; Court 1998; McNay 1997; Hodges 2000]. Sizer [1987:557], for instance, predicts that 'a further period of financial stringency would constrain the capacity to undertake effective teaching and research and to respond to the changing needs of society'. As an example of redundancy, Kingston [1997:22] reports that Swansea University has announced unprecedented plans to axe more than 100 members of the staff, using the results of the RAE.

Pressures on the research community

Another main feature of individual impacts is the physical and mental difficulties in responding to changing institutional and professional cultures, i.e. increasing stresses and pressures on staff [Startup 1985; Whiston 1992; Daniels & Guppy 1994; Nixon 1996; Trowler 1997; Warner 1998; Henkel 1999; James 1999]. Dealing with the balance of influences between the individual, the department and the institution, Henkel [1999:120], for example, points out that the RAE 'has exploded the myth that professional responsibility and individual motivation are universally sufficient to sustain research, and in consequence departmental structure for support, pressures and even occasionally direction have been established'. As a serious example, James [1999:2] reveals an epidemic of stress-related illnesses across the UK, referring to the sudden death of a member of staff at Exeter brought on by stress.

STUDIES ON THE CHANGING POLITICAL CLIMATE

Increase in government intervention

Numerous discussions place the topic in association with current policy discourse, particularly the changing relationship between the state and HE [Shattock &

Berdahl 1984; Pratt & Silverman 1987; Kogan 1989; Sizer 1989; Pollitt 1990; Turner & Pratt 1990; Peters 1992; Pritchard 1994; Bird 1994; Barnett 1996; Trow 1998]. Some authors refer to an increase in government intervention and its implications. Pritchard [1994:262], for example, says that 'if one accepts that the funding bodies are acting for the Government, then it is clear that far from allowing the untrammelled operation of the HE market, the authorities have frequently intervened to shape events and outcomes'.

Changing nature of university autonomy?

The nature of university autonomy and/or academic freedom is argued by several scholars in connection with accountability [Berdahl 1990; Eustace 1994; Tapper & Salter 1995; Alderman 1996; Barnes 1999]. Tapper & Salter [1995:70], for instance, refer to the changing balance between institutional and individual autonomy:

> In the past, the autonomy of the institution and of the faculty was perceived as a symbiotic relationship. Now, one could argue that universities are autonomous of their staff. The most symbolic manifestation of this crucial change is the rapid erosion of academic tenure but there are a number of significant related matters: the ability to make more discretionary rewards, the ability to vary more widely conditions of services, the instigation of more tightly monitored probationary procedures, the abolition of a fixed ratio of senior to junior faculty and the abolition of 'the professorial average' salary.

Despite a number of studies dealing with academic freedom and university autonomy in general, few specific alternatives to the present system have been suggested, though most agree that it is the university that has a role in the transmission

of knowledge and the maintenance of a culture that 'goes far beyond the present concern of central government' [Barnes 1999:175]. Yet, in realistic terms, Kogan [1994:57], for instance, examines the ways in which institutions and academics might creatively determine their plans for research, while criticising the system; it is 'designed to be purgative rather than developmental, reductionist rather than a contribution to creating a larger and more useful scientific base in this country'.

3-5 Views of the Funding Councils

This section examines the view of the Funding Councils through an interview with the RAE Manager appointed for the RAE 2001 on behalf of the four Funding Councils (FCs) in the UK (HEFCE, SHEFC, HEFCW and DENI). The FCs are responsible to the government for the development and implementation of policy and funding mechanisms within the overall strategy set out by the government.

The content of the interview covered various aspects of the RAE: the process of policymaking, methodology and general issues. Since the Manager has to lead the whole operation of the RAE 2001 across the UK, his comments tend to be inclined to the view of 'hard' aspects of managerialism, i.e. always ensuring 'hard evidence', though he shows sympathy for some critical arguments.

RAE MANAGEMENT WITHIN THE FUNDING COUNCILS

For each RAE, there is a new RAE team appointed, comprising the Manager, two RAE officers, two administrative officers and three members of the staff who are charged with data collection. As a team, they meet once a week to discuss the current stage they are at to ensure that all their activities are properly co-ordinated. Apart from these main members of staff, two analysts are appointed to develop the software for the

RAE submission. There is also another RAE manager based in the Scottish Funding Council, working as a remote member of the team. All of these members in the Team have previous experiences of working in the management section of the HE sector. In addition, the RAE Manager has a team of sixty panel secretaries who support each of the assessment panels. The main job of these secretaries is to record the discussions of the panels in order to ensure that the panels are conducting their jobs based on the rules set out in the criteria. If there is any problem on the operation of the panels, these secretaries have to notify the RAE Manager who then has to resolve it.

GENERAL PROCEDURE OF THE RAE

After each exercise, the Funding Councils carefully reflect on their conduct in order to identify whether or not they will repeat the exercise and to consider what improvements can be made to the process. They publish a review report on their conduct as well as seeking public comments. The Manager illustrated an example of the process of the exercise, referring to his experience since 1996:

> The last exercise was in 1996. Immediately after that exercise was concluded, the FCs had begun a detailed review. The RAE Manager, who occupied my job last time, personally prepared the detailed report on the conduct of the exercises. There was (also) a specific report commissioned by a senior professor of information science, and he was asked to examine the data collection process and produced a report on that aspect with a range of recommendations. And FCs also undertook the detailed process of discussion of the whole HE sector through the consultation process. That was begun in 1997, based on a series of questions about the future research assessment in the light of the outcome of that discussion, and that is again the subject of consultation together with a series of supplementary questions. The outcome of all of that consultation

> process, I then took and built it into the arrangements for the 2001 exercise. At an early stage in 1998, the FC had decided that there would be another RAE and it would take a broadly similar form to the exercises of 1996.

Since then, a detailed series of discussions had intensively been held on the regulations and procedures for the new exercise. Towards the end of 1999, the panels had completed the details of their criteria and working methods, and these were published in advance. The RAE team sought to identify issues as panels finalised criteria statements and each panel then received a summary of the general comments made by the RAE Manager. Later, the full text of every comment is made available to the umbrella groups of the panels to which they belong.

INTERACTION

Throughout the process of policymaking, there are a whole series of interfaces that the FCs work through. At the international level, the FCs carry out a full range of extensive programmes of international collaborations and developments as a part of a deliberate process which seeks to exchange views and experiences. Since there is no direct parallel of the RAE in terms of its length of development or scale of operations in any other part of the world, they try to observe general experiences of assessment systems in other nations and develop joint projects which can be of mutual benefit.

Though the FCs have a degree of collaboration with EU nations, their aim is to establish international collaboration more broadly, including a long-term joint programme on institutional assessment with India sponsored by both countries' governments, established programmes with Australia, some developing links with South Africa, a programme on the development of assessment systems with China and a degree

of discussion with both institutions and central government in Japan on the development of research assessment.

At the national level, since the FCs are public bodies which sponsor the Department for Education and Skills (DFES), the Manager says that "there is a tacit agreement" between the FCs and DFES in terms of policymaking. As a part of the preparation process, the FCs also discuss a range of issues through specific task force groups working individually with a particular government's department, such as the Department of Health, Department of Trade and Industry, and with the Confederation of British Industry. With the Universities UK (the former CVCP), the FCs maintain a dialogue on a wide range of RAE matters at various stages of the process, and one of the main issues which was continuously discussed during 1999/2000 was the development of a 'Code of Practice' for institutions on the use of RAE grades. With regard to HEIs, a series of regional seminars are organised during which officials of the FCs meet with the representative of institutions, giving advice to them on the RAE submissions. The Manager or his colleagues also attend a panel meeting in each unit so that they can deepen their understanding of specific issues raised by each of the subject areas. The RAE Manager also has a variety of public speaking engagements.

VIEWS ON METHODS

Purpose

In the light of the original purpose, some articles warn that the RAE has gone 'too far' [e.g. THES 9/5/97]. However, the Manager has different perspectives:

> It has been refined each time that it has taken place, and it is now a very mature and very sophisticated assessment system. The purpose of this remains the same as in the

> first exercise. It is designed to identify the quality of research work so that each FC can then make allocation of research funding from the public purse to the highest quality research work.

According to the Manager, the FCs have acknowledged most of the criticisms presented by academics as to the effectiveness of its methodology. Since a key principle of the RAE is that "it should measure without distorting", the FCs try to reassure by making a number of amendments for each of the issues raised.

Assessors

In selecting assessors, it is a frequent criticism that women and junior researchers do not have the same degree of credibility. With regard to this, the Manager comments that it is a natural outcome of the consultation process:

> It is true that in all peer review processes, we tend to be conservative. Then this is something we have in common with the Research Council that anybody using peer review processes tends to favour those who are familiar with them, and that is the sort of things that they are involving themselves in. And I think that while there are criteria for the panel membership, I think (there are) many young researchers, who are equally capable of doing their jobs as more senior researchers. But it is clear from the consultation process that they would not have the same degree of credibility, because people in the subject community tend to prefer senior established figures.

According to the Manager, the FCs also pay careful attention to the way in which panel members are appointed:

> We take particular care to make sure that we have suitable breadth of expertees in each panel. We also want to make sure that we reflect the profile of 4-5 nominations put forward to the learning society and others, and we get reasonable geographical spread, we get appropriate gender balance, and we get an appropriate range of national perspectives from across different parts of the UK.

As for the possibility of inviting overseas assessors, the Manager assumes that "that is one of the possibilities" and in the RAE 2001 panels are consulting non-UK experts. If the outcome is truly effective, then the FCs "may develop (it) further in the future".

Interval

Some academics, particularly in non-science subjects, are of the opinion that the present interval does not match their actual rhythm of research. In this respect, the Manager insists that the current period of interval is drawn from the result of the consultation process:

> What we are trying to do is to get the balance between measuring sufficiently often to reflect the changes in funding stream and not measuring too often so that it won't distort normal research publication patterns. For me, having consulted on this aspect, almost everybody at the centre is of the view that intervals should be between 4-6 years, and the majority of people said it should be fine. So we followed the advice of the sector on setting intervals.

In connection with the issue of intervals, the number of papers required for submissions is also questioned by some researchers. The FCs have asked the panels to

be conscious about those who are engaged in long-term research activities. As a result, the Manager explains that most of the panels in art and humanities have explicit criteria where less than 4 publications are presented.

OTHER ISSUES RELATED TO METHODOLOGY

Treatment of unfairness

Quite a few issues have arisen regarding the unfairness of the panels. For instance, the FCs have acknowledged that in the 1996 RAE that "there were certain amounts of frauds [sic]" produced by some academics, though that was a minority behaviour on the whole. In the RAE 2001, therefore, the FCs have an order of procedures which is more rigorously designed to find this. The Manager insists that their intention is to limit "the capacity for unfairness in improving performance based on gamesmanship, rather than improving performance based on genuine strength". The Manager comments that the FCs have consulted the panels on the development of the criteria in considerable detail:

> What we try to do and which is reflected in the criteria is to make sure as full as a range of research activities are considered by the panels, so we ask them to take account of the whole range of research outputs, not just traditional academic outputs, but also applied research work which is appearing in less familiar formats.

Inconsistency of the panels' judgements

According to the Manager, variability of the panels was pointed out in the feedback process of the 1996 RAE:

> It has been thought in the past (that) some panels had marked too hard, and part of the problem was (that) there was never any independent check on what panels were doing because panels were looking [sic] completely in isolation.

As a result, the FCs have completely changed this procedure in the RAE 2001 so that the panels are working in discussion through comparison. Specifically, what each of the panels is required to do is:

a) to produce a report for each institution;

b) to take a balanced view of all activities that are presented; and

c) to use the sector to produce a wider feedback report in which they discuss the strength of each discipline.

Thus, the FCs have tried to overcome the issue of inequity. According to the Manager, the FCs also try to ensure that every university has equal opportunity to perform and that is why they set up the criteria in advance and take account of all forms of research activities.

Objectivity of the system

The objectivity of the panels' judgements is often questioned by academics. With regard to this, the Manager admits its subjective nature:

> We make a deliberate virtue of this. We don't pretend that the exercise is objective. We ask panel members to form a professional judgement on the quality of research presented to them, and we accept that there will be a subjective judgement. It's a subjective judgement which seeks to be as fair as it can be, and that has a range of

dimensions... So we accept that that is a feature of the peer review system.

Treatment of interdisciplinary research

The approach that the FCs have adopted is to maintain the discipline based framework, and the Manager certainly acknowledges that a number of academics consider that the system has tended to neglect those crossing the boundaries of the subjects:

> A system of this type is not the best to assess interdisciplinary research. So lots of comments on that, concern about the types of research activities which are undervalued in the RAE. There has been a view that the RAE has only valued most highly very traditional forms of academic outputs. And that has been felt to be the disadvantage of applied research work and the work which is done by collaboration with industry, all work which is done for policymaking bodies, for example, governmental departments, that work is not necessarily published in academic journals.

According to the Manager, the FCs always consider an appropriate method to reduce any negative effect in assessing this type of work as much as possible:

> We, first of all, have sought to ensure that the panel members have experienced interdisciplinary research, and then have to talk through how they are going to assess interdisciplinary work. We have improved the mechanism of the fairness between the panels and between the disciplines, and we have given the institutions the right to insist that interdisciplinary work be looked at by more than one panel, if we feel that is more appropriate. We improve the methods of communication, requiring panels actually to talk with each other, rather than just to pay for exchange of information, and we are

open to a much wider range of special advisers to call on to help with the work than in the past.

Thus, according to the Manager, the FCs have tried to improve the fairness of the system.

In the substantial study of the impact of the 1992 RAE commissioned by the HEFCE [1997:82-86], it was investigated what percentage of staff actually 'feel inhibited in pursuing interdisciplinary research because of the disciplinary based Unit of Assessment in the RAE', as part of their staff survey questionnaire, based on 393 usable returns from 15 HEIs. It was found that among 365 academics who responded to that specific question, only 20 % of the respondents (21.0% of those from pre-1992 institutions, 15.2 % of those from the post-1992 institutions) agreed. Referring to this, the Manager insists that "there was no evidence that the RAE has systematically made any negative effects on interdisciplinary research". It is concluded in the study that 'opinion on general issues gives a more critical stance than more factual accounts of specific behaviour' [HEFCE 1997:82].

Separate funding system for teaching and research

Unlike many countries which have tended to adopt a holistic funding system, Britain has developed a separate funding system for teaching and research since the mid-1980s. The Manager admits that that is "something which we have to debate quite carefully" and the issue was scrutinised through the Fundamental Review of Research Funding and Policy conducted by the FCs [HEFCE 1999b]. Though the FCs have realised that a number of academics point out the close linkage between R&T, the Manager gives a clear reason for the preference of a separate funding system in the UK:

> The government tends to prefer a system where streams of resource and use of resource are purely identified and I think that is going to become more of a feature of government funding in the UK rather than less. I think (that) the government require accountability, and that is very difficult to do with a holistic funding model, because it is very difficult to identify where the money is going.

Therefore the FCs assume that the government will maintain the separate funding system.

Departmental research grading

The current system intends to produce research grading on a departmental basis, while avoiding any disclosure of the outcomes of assessment on individual work. The Manager explains that the FCs need to know the whole culture of the research environment:

> We look at not only the output work of individuals, but also look at the whole culture of the environment of departments, the infrastructure of arrangement for supporting research. Because those are as important as maintenance of research activities. We have resisted the suggestions we should be reviewing individuals, because we are not funding individuals directly.

Correlation of department's ratings

It is often argued that there is a correlation between department's size and the grades they are given. With regard to this, the Manager says that it is a matter of 'the characteristics' of the discipline, rather than those of the assessment:

> It is true that in many subjects, there is a correlation of the size of the departments in the highest grade. It's not a perfect correlation, but it is often demonstrable. But that is very often a characteristic of the discipline, rather than the characteristic of the assessment process. It is easier to sustain high quality of research in a department which has good infrastructure, which has a lots of equipment, which is drawing on a lot of research funding from other sources.

The more real concern, according to the Manager, is that "it may be inappropriate for a science-based model to be imposed in non-science", since it is easier to sustain the high quality of research environment with the critical mass of researchers in science, while research culture in non-science is largely neglected. As a solution, the FCs have simplified the definition of the grading scale in the RAE 2001, requiring a more precise description on individual criteria from each panel. The FCs have asked all the panels to raise critiques of assessment and clarify their views.

VIEWS ON IMPACTS

Reinforcing hierarchy?

On the point of whether the system has reinforced the existing hierarchy, the Manager feels that it is a natural outcome where the majority of public funds for research is supposed to be concentrated on the very highest quality research activities, and in that sense, "that is the whole purpose of the system". The Manager describes its positive effects:

> Certainly it reinforces different profiles of institutions with regard to the balance

> between their research and teaching activities. The implications are... in addition to targeting the funding on the best available research, it is undoubtedly true that the RAE has provided a great stimulation to institutions to manage their research more effectively, and to focus resources internally on supporting high quality.

The Manager also refers to another conspicuous phenomenon:

> What we have seen in each exercise is a quite clear increase in the proportion of research work which is in the highest achievement of the highest grade, and the number of staff within departments which are achieving highest grade has also risen, so there is a progressive improvement in research quality across the UK as a whole.

Academic transfer market

According to the Manager, the FCs accept the principle of a transfer market; a small number of rich institutions can strengthen a particular research area and receive appropriate funding by taking more brilliant researchers, as "the key strength of the RAE is that it does identify a small pocket of research excellence and make funding available to them". In order to collect 'evidence', however, the FCs conducted a study of the academic transfer market and it was found that there was not a great scale of movement between universities as had generally been predicted:

> The academic job market is remarkably stable when you compare it with those in any other sectors of employment. In a regular year, the movement of research active staff is about 3.5%, and a year before the RAE it has increased marginally by about 3.7%, the biggest increase is just over 4% that happens a year after the RAE.

The FCs also analysed why this aspect is stressed, and found that since those who were moving between universities were key individuals in most cases, "the impression is exaggerated", though the FCs "are aware and trying to deal with that as far as" they can. For instance, a new device is introduced in the RAE 2001 so that institutions which have lost any staff member during the last twelve months before the assessment date can include their work to be assessed on a equal basis.

Job losses

While some academics move to the institutions with higher profiles, it is reported from time to time that a good number of staff who were regarded as not having performed well in the RAE were dismissed. The Manager admits this, though he feels that it is a natural outcome:

> Redundancy is not the device generally used by the universities, although it happens in some cases. What you can do is to make somebody redundant and appoint somebody else to do their job because then they feel that it is a legal test of genuine redundancy, but it is true that a good number of staff take early retirement.

Conversely, the Manager shows its reverse effect:

> But as a result, there has been a re-investment, and there are more staff (being) active in research now than any time in the past, in each RAE they see more research active staff being returned. For instance, there is 11% of increase between 1992 and 1996. Some 56,000 researchers if they see a similar level, then more than 60% of research active staff are returned... although there have been some job losses, but also there have been some job gains... which is not just confined to academic life but in

employment in general, there are many many more fixed term appointments.

Effects on other activities

According to the Manager, the FCs acknowledge almost all the aspects reported, e.g. neglect of teaching and/or supervision, neglect of the close relationship between teaching and research. However, the Manager has a different viewpoint:

> Lots of the things about the RAE and its broader impacts are very difficult to prove, but is very easy to claim. There have been a lot of anecdotes to support that view, but there is very very little hard evidence. There is a need for a clear consideration for the real evidence.

The Manager explains that, as a matter of policy within the FCs, all policies are made on the basis of evidence, obtaining the maximum possible information by supporting the development of policy test principles. Therefore, it is difficult to take an initiative to resolve it unless the FCs clearly perceive 'hard evidence'.

On the other hand, the Manager reports a positive effect on the university management. After the 1996 RAE, the FCs conducted a survey on the cost of the RAE, and found that it amounted to 24.7 million pounds, which was less than 1% of the value of the public funds they distributed excluding the indirect cost, overhead cost and opportunity costs. According to the Manager, this is "remarkably cost-effective", even compared with the figure given by the Research Councils, which typically runs at about 6-7% of the cost of the money distributed.

Pressures on the research community

An increase in staff's mental and physical stress is frequently pointed out. The Manager admits this, though he does not regard it as a negative impact:

> There are many academics who feels (that) the stresses have becomes greater, but I think that it is inevitable where substantial sums of public money are involved. But I think many people would actually say that opinion is divided. If you talk to many researchers, they actually like to say they welcome the fact, but inevitably they are making an effort, and in that the collegiality is strengthened in some way... I think that there are contradictory pressures there.

The Manager also insists that it is inevitable in the development of society:

> Certainly there are increases of pressures, but I don't think that academics are (any more) out of line than anywhere else in the public sector and they have some positive impacts as well. It is part of the general development of society (that) where everybody feels an amount of pressure, there has been a general increase in pressure to produce performance of her (or his) level across many sectors... I still think that the pressures in the public sector are often less than those in business, because it tends to be more secure in employment than in the private sector.

Government intervention

It is pointed out that government intervention in HEIs has enormously increased over the last decade through the introduction of assessment. The Manager takes it for granted in the process of their management:

> That is probably true. Auditing is generally increased and it is to do with a better

> control of public funds rather than it having been singled out. Accountability and control will not go away. We will be seeing them more in future government.

As a personal viewpoint, the Manager comments that "it is entirely appropriate that the use of public funds should be subject to proper control and audit". In fact, the Manager questions the concern that audits can be politically manipulated as, in his view, "research activities should reflect national priorities to an extent", and there is a limit beyond which the government should not go without damaging fundamental research.

The Manager also refers to the specific position of the FCs as an intermediary organisation between the government and HEIs:

> HEFCE itself does not want more central control. We are very keen to have the lightest possible touch or lowest possible impact on institutions. While we are in order, we have a statue of responsibility. We are required by the government to carry this out, so we must reflect their wishes as well.

However, the Manager acknowledges that there is a constant tension between the government and the autonomous HE sector about the degree of interference and the degree of direction. This is because, according to the Manager, in promoting "the highest possible quality", it is difficult to implement the system "without damaging things you evaluate". Therefore, the FCs make an every effort to avoid any negative effect:

> We see certainly the difficulties and dangers. We will try and advise based on our knowledge of the sector, so the government policies are implemented sensitively and

> we are very keen not to see things overly evaluative. At the same time, we believe that it is critically important that it is quality assurance which gives accountability of public funding. And the jobs must be balanced.

LIMITATIONS

Although the Manager's overall perspectives on the RAE are relatively positive, one of the negative impacts is clearly perceived as a personal view:

> Part of our problems is that all our institutions are trying too hard to be the same, and there is a real question about the future mission and future diversity of the institutions within the HE community broadly defined. There is an assumption made that the only 'good universities' are the universities which maintain a very high level of research activities in a range of subjects. But there are some universities which are particularly strong in teaching, and particularly in teaching students from disadvantaged backgrounds, or they may not have the same educational opportunities. Some of the newer universities tend to be better in those areas. There are also universities which are particularly strong in applied research and vocational education, and again those institutions tend to be different from the most research intensive universities. There is a need for an appreciation that each of these forms of universities activities are equally valued, although they are different, and there is not a sufficient acceptance that there is a type of difference which is actually a benefit for the country.

Thus, the issue on the improvement of the institutional missions has remained untouched, though it is undoubtedly important for the future enhancement of the HE sector.

FUTURE VISION

According to the Manager, there is a debate at the time of writing within each of the FCs on its own research funding and policy, carefully examining the effects of the RAE to see if it is still appropriate in the light of its objectives and the nature of funding policies. All concerns on the future funding system were discussed through their Fundamental Review. As to the future of the system of research assessment, the Manager personally feels that the RAE will be maintained under the dual support system, though there might be some major changes, since "as long as there is a policy of funding based on selectivity, you need to have a system to measure in some way".

On the whole, the Manager's view has tended to be based on 'hard-managerialism', insisting the merits of the system from the management side, though expressing some sympathy with regard to fundamental defects of the system.

3-6 Summary and Observation

The quest for quality assurance in the UK emerged out of the climate of the transitional period in the national policy in the mid-1980s under the Thatcher Government, imposing tight control of public expenditure and introducing managerial techniques, e.g. performance indicators. The creation of a new system was heightened by the growing public awareness of public services and spending, together with the changing nature of demographic trends and numerous social changes. Although the system undoubtedly increased 'productivity', it produced inequality and contradictions in many parts of society and led to short-termism.

The system of research assessment openly challenged the academic community in the 1980s which had not perceived the notion of market value for a long period of

time. As in other public services, the HE sector eventually saw a fundamental change in the political ideology of the management that set the parameters within which HE was to be conceived and practised throughout the post-war welfare state under the dual support system. In practice, the system of research assessment was initiated via the idea of rationalisation of science departments in the mid-1980s in order to concentrate scarce funding on high quality research, and was practised by the UGC in 1986 for the first time and later by its succeeding funding bodies at three to five year intervals. The formulae adopted have been improved through feedback and consultation processes, however, the system has at the same time generated a number of unintended impacts on the HE sector and beyond.

With regard to the system of research assessment, a number of academics in various fields have expressed their concerns over many respects, e.g. methodology, impacts and political discourses. Methodological issues include the applicability of the present system, the advisability of separate funding for teaching and research, and the unfairness of the panels' judgements. Impact studies can be seen on the negative effects on research and other activities, the pressures on research communities, changing organisational cultures, transfer markets and the reinforcement of existing HEI profiles. Political issues include an increase in government intervention and the threat to university autonomy. With the indication of a number of negative impacts, most researchers suggest that more studies are required before the implementation of the present system.

According to the RAE Manager, the FCs have acknowledged most of the issues raised by academics and tried to improve the system by examining it very carefully through the consultation and feedback process after each exercise. The Manager tends to regard some aspects of the negative implications raised by academics as "natural

outcomes of the system", supposing that the university is part of the public service.

As a principle, the FCs always try to seek maximum hard evidence to support the development of government policy, by conducting a number of pilot studies. As a result, they have found that some aspects are overplayed, while there is no substantial proof to support those views. While the FC's view is consistently based on 'hard' aspects of the management, the Manager does show some understanding on several issues such as the need for the enhancement of institutional mission and the applicability of the system in non-science.

Thus, there has been a gap in understanding between the FCs working on behalf of the central government and academics. According to Trow [1994:15], this gap is attributed to their different perspectives towards managerialism; academics tend to look at things from a soft-managerialism perspective, whilst the managers and policymakers see the matter from a perspective of hard-managerialism. In the future more interaction could be developed between the government and academics, in order to facilitate better understanding of each other's perspective.

Chapter 4 Case Study of Warwick University

4-1 Introduction

This chapter explores the practice of one UK university as an example of the institutional reaction to the introduction of a nationwide system of research assessment and its implications. As stated earlier, reactions at Warwick University are analysed at three different levels: institutional, departmental and individual. After clarifying the position of the institution, the chapter first examines institutional reactions. Later, experiences of two selected departments are illustrated - one science and one non-science - followed by further investigation of individual perspectives.

4-2 Brief Outline of Warwick University

This and the next sections are mainly based on individual interviews with the previous Registrar (1983-1989) [M] and with the former Head of the Research and Development Service Office (RDSO) [L] within the management section of Warwick University, as well as on documentary analysis. These two interviewees were not concerned to preserve their anonymity.

HISTORICAL CONTEXT

The name 'Warwick University' itself tells of its unique origin and present success, as it is not literally based in the Town of Warwick; it is firmly rooted in

Coventry. Since the end of WW II, the City Council of Coventry had made a great effort to rebuild and replan the city [Shattock 1994:81]. With its strong attachment to apprenticeship programmes and close knowledge of industry, the City had naturally produced a demand for better provision of technical education in the post-war era, and that led to a movement in the early 1950s for a technological university in Coventry [Rees 1989:33]. In order to successfully gain the government's agreement on the creation of an institution in the West Midlands, however, Coventry had to ask the County of Warwickshire to assist in the bid [Shattock 1999:109]. The City Council also asked for support from local industrialists, trade unionists, and the local intelligentsia of school teachers and college lecturers.

When the plan was formally discussed among this mixed group of people in the early 1960s, it was proposed by one member of the group that it should be named 'Warwick University', as it would sound better than 'Coventry University' or 'University of Mid-Warwickshire' to the market [*Independent* 14/5/98], and no one in that group expressed any strong objection to it. The university was formally founded as one of the 'New Universities' in the early 1960s in a semi-rural location bordering the City of Coventry and the County of Warwickshire.

From the earlier years the character of the university began to be shaped [Clark 1998:11]. One of the differences from other 'New Universities' was clearly that, from its early days, Warwick's identity had been 'tied up with industry' [*The Independent* 14/5/98]. Towards the late 1960s, its close industrial links were particularly criticised by the radical left-wing staff within the university [*The Independent* 30/5/99], and a group of staff and students produced a book called *Warwick University Ltd* in 1970 under the editorship of E. P. Thompson, the historian of the working-class. The book describes the consequences of the attempts of its founders to make a 'business university' [Bankowski

& Mungham 1974:179], which had supplanted the idea of academic excellence with those of the industrial corporation [*The Economist* 12/11/94].

During this period, the Vice-Chancellor and his immediate staff therefore had to contend with Warwick's more left-wing staff as well as militant students who attacked its entrepreneurialship [Clark 1998:14; *Financial Times* 1/4/99]. What the radical group criticised was:

> Neither efficiency nor productivity were ever, in the long run, achieved by the manipulation of people by limiting their rights, by defrauding them of their own initiatives, by denying to them participation in the control of their own affairs ... and what is wrong, again, is the whole system of values - the entire ordering of human priorities - of this insistent managerial propaganda [Thompson 1970:163].

However, the movement was carried through 'without any clear theory as to what social reality is and what part it plays in society as a whole' [Thompson 1970:179], therefore it had access to 'no constitutional means to enforce reform' [Thompson 1970:159]. In the meantime, a number of newspapers also criticised the university, bringing further criticism from both Right and Left. As a result, the Senate House had almost lost its primacy by the beginning of the 1970s, though regained its power at a later stage [Clark 1998:14].

In the 1970s, the institution as a whole threw off its anti-industry attitudes and took up 'a much more outward looking focus' [Clark 1998:14]. Since the staff and student disturbance in this period had created a negative public image, the university had to spend a great deal of time and effort dispelling this and 'turning faculty sentiment away from an anti-industry stance' [Clark 1998:15], though the deeply rooted anti-

business attitude of some academics was not swept away promptly and some staff were still reluctant to work with industry.

By the late 1970s, Warwick had realised that 'in the modern era, a successful university should be able to demonstrate that its success was based on something more than a narrow base of research excellence and the ability to attract the best students' [Shattock 1994:121]. This eventually led the university to develop out-reach work by generating links with companies [*The Independent* 7/6/98] and by creating a better relationship with the local communities. For instance, merging the College of Education with the university in 1978 created 'teacher-education relationship to the local area', which was followed by 'the development of extramural or continuing education and the joint sponsorship with local authorities of a science park' in the early 1980s [Clark 1998:15]. In addition, creating a number of research centres had enabled the university to develop many inter-disciplinary activities which were partly associated with the local community [The University of Warwick 1991:108].

When the Thatcher Government announced the first post-war education cuts in the early 1980s, Warwick had taken the decision 'to stand on its own feet' by earning income independently, assuming that waiting for the government to propose more money was just 'an option taken only by those who did not face the reality' [*Financial Times* 1/4/99]. Hence, the government's announcement in the early 1980s in a way triggered Warwick to expand its 'entrepreneurial ethos', while 'other universities could do nothing but be distraught, struggling to make ends meet by downsizing their operations' [*The Observer* 3/5/98].

Thus, the development of Warwick raised general questions on the role of universities within contemporary society.

PRESENT STYLE

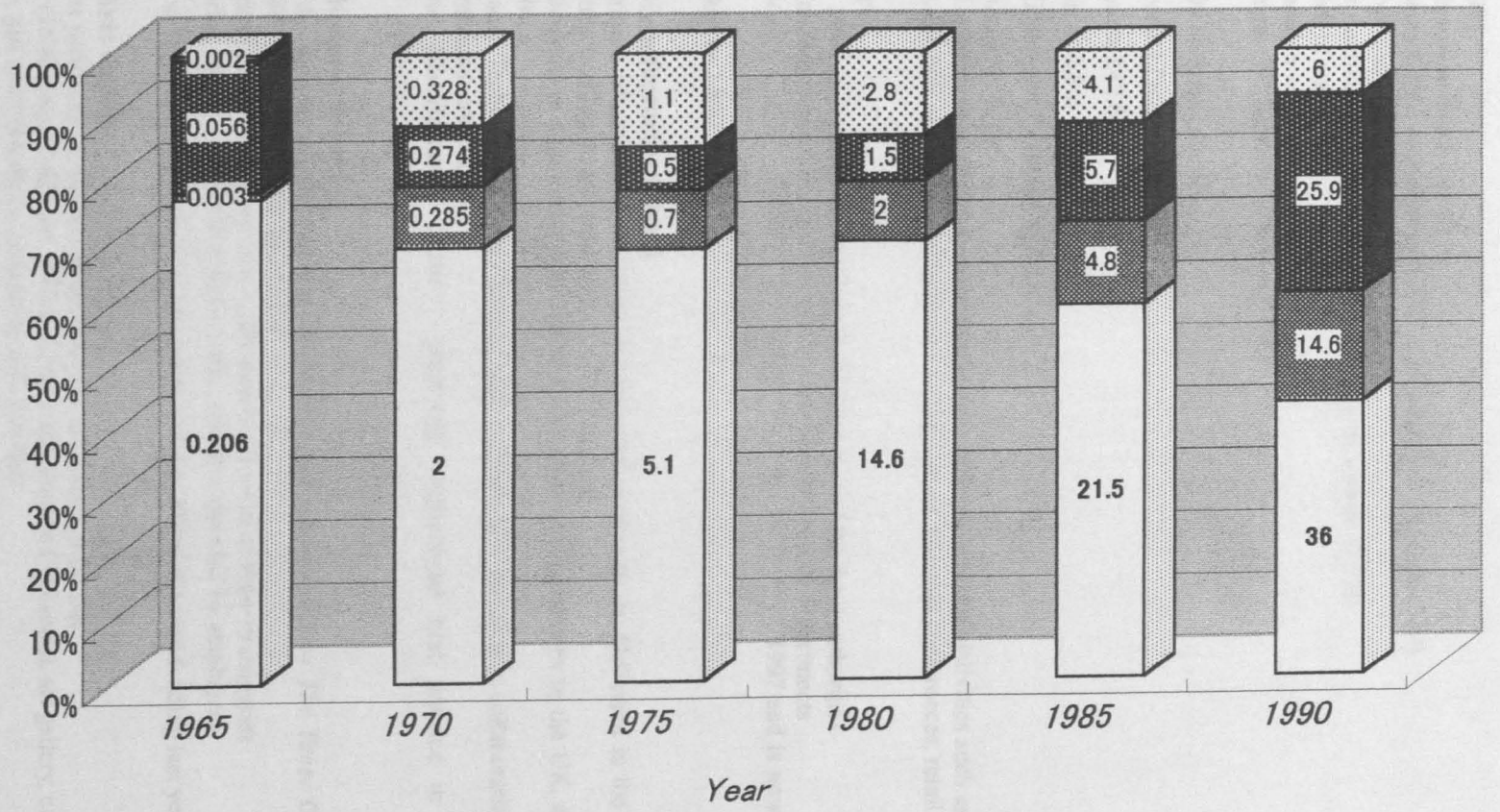
Since the early 1980s, Warwick has extended its external income activities while reducing state funding [Figure 4-1]. The main activities generating external funding include the Warwick Manufacturing Group, which has a particularly strong relationship with West Midlands' engineering companies, the Warwick Business School and the Warwick Science Park which is working with business in the region [Table 4-2]. All this income is managed and monitored by a group called the 'Earned Income Group' [*The Economist* 12/11/94]. The income earned from these external activities is then used for academic goals, and this has become a crucial part of institutional viability [*Financial Times* 1/4/99].

Nowadays, unlike most universities in the country, Warwick generates more than 60 per cent of its own income from nearly 50 different income streams, earning about 130 million pounds a year while relying on the government for just 39 % of its income [*The Birmingham Post* 22/8/98]. The fact that Warwick generates as much revenue as it can independently has led the university to enjoy its institutional autonomy by spending the money 'with a free hand' [*The Independent* 7/6/98]. Implying that more and more universities tend to depend on the policy of central government, **M** is proud of Warwick's strength:

> There is a tendency (in UK universities in general) to only do the things where there will be money rather than to do the things because they are important to do. I think this university has retained the willingness to do the latter, rather more than many, because that is possible, because we have got more money than most.

Hence, Warwick's typical approach and its idea of developing new sources of external

Figure 4-1 Incomes of Warwick University (1965-1990)
Figures in Million Pounds



Source: The University of Warwick (1991), p.94.

Table 4-2 Basic Facts and Figures of Warwick University

Size (1997/98)

- Total number of students: 15,900
(undergraduates 8,350 postgraduates 5,830 other taught programmes 1,720)
including overseas students 2,515
- Students on continuing vocational education and open studies 17,170
- Total number of staff 3,547
including academic 738 research 576
- Size of campus 292 hectares (720 acres)

Finance (1997-98 finance figures)

- Total University Income £149.2m
- HEFCE Grants £42.6m
- Tuition Fees £32.9m
- Research Grants and Contracts £22.8m
- External Income £50.9m

61 % of the University's total income is currently derived from 'earning' activities such as self-financing short courses, research contracts, management training centres, vacation conferences, retail and catering

Science Park

- Opened in 1984 - a joint venture between the University and the local authorities
68 high technology companies, many linked closely with University departments
- New Innovation Centre at Warwick Technology Park opened in April 1997 and is now fully let to 15 companies
- Total Workforce 1,800

Warwick Manufacturing Group

- Post-Experience education for managers and technical professionals. Delivered in the UK and in six overseas centres worldwide, and used by over 500 companies
- 4,000 participants in engineering and business management programmes in the UK, the Pacific Rim and South Africa
- The Advanced Technology Centre - leading edge technological research in collaboration with over 40 UK and international companies
- International Manufacturing Centre - promoting international best practice in manufacturing engineering

Warwick Business School

- Rated in the top two for the teaching of business and management by *The Times Good University Guide*, 1998, for the sixth successive year
- 17 study programmes attracting over 3,300 students from more than 70 countries
- The Warwick MBA - four flexible study routes, widely supported by employers
- Research of international excellence, attracting over £3 million external funding last year

Warwick Arts Centre

- The largest performance and visual arts complex of its kind in the UK

Concert hall (1500 seats), 2 theatres (570 and 150 seats), cinema (225 seats), art gallery, conference room, music centre, gift and book shops, restaurant, café bar, bars

- Attracts some 250,000 visitors a year to more than 1,100 events

Source: The University of Warwick (1999).

income have in many respects brought rewards, and in this sense Warwick is, as Tony Blair approved in his election campaign, 'at the cutting edge of what has to happen for the future' [*The Observer* 3/5/98; *The Independent* 30/5/99], though not all the staff at Warwick are satisfied with these entrepreneurial ideas. They are particularly criticised by those in Arts and Humanities who have found it hard to attract sponsorship [*The Economist* 12/11/94].

The institutional manager, **L** is confident of Warwick's strategy:

> With careful planning, we are broadly accurate in predicting how much money we get from external sources. That is perceived to be the only way (that) Warwick would expand and be successful.

It is undoubtedly this entrepreneurial spirit that has driven a relatively new university into the super-league of academic excellence [*The Birmingham Post* 22/8/98]. Warwick has made remarkable progress in achieving operational strength and high status as a comprehensive research university [*Financial Times* 1/4/99], and being highly rated for both research and teaching. Nowadays, it is regarded as one of Britain's top universities, and has secured its new-found status as 'a credible rival to Oxbridge' [*Financial Times* 1/4/99; *The Birmingham Post* 22/8/98; *The Independent* 7/6/98].

In terms of collaboration with other HE institutions, current areas include technology transfer via the University Challenge Fund and electronic learning and teaching. Warwick also has a strong connection with Leicester University through the Leicester Medical School.

With regard to the community, it has been said that 'pressures on institutions and their staff have caused a serious decline in outreach work, and the level of activity

has been reduced' [THES 2/4/99]. According to **L**, Warwick has continued to develop out-reach work:

> Because it is essential to the economic viability of the institution, and because we will never have sufficient amounts of public funding from the government to sustain ourselves.

Overall, **L** says that the university is successful in balancing various outreach activities, e.g. the Arts Centre, 2+2 Degrees and the Open Studies Programme.

Thus, there is a tendency for Warwick to be willing to accept government's policy by responding to it positively in various respects.

DEPARTMENTAL AUTONOMY

Originally created by the founding professors, it is said that 'the strong departmental base' is a dominant characteristic of the university [The University of Warwick 1991:63]. **M** explains a main feature of Warwick's structure:

> Though in theory, there is a 'Faculty Structure', yet it is, in practice, not exactly the Faculty Structure where there is any devolutionary funds for each of them.

L also stresses the direct relationship between the centre and the departments:

> Individual departments are all equal before the main university resources and the Research Grant Committee. If someone has a good idea for a department, and it sounds feasible, then the university is backing, and that is a characteristic of Warwick's

> success. We support entrepreneurial ideas. In short, there are 'very strong departments and a very strong centre'. It's always a dialogue between the two.

However, **M** particularly refers to the case in which the centre intervenes in the department's operation:

> We have gone out, when a department was poorly managed, and recruited the Head of the department from outside, not absolutely against the wishes of the department. (In that case) you certainly have to take the leadership of the department very seriously, and therefore in consultation with the departments, the university legally has the ability to impose... so the university puts pressure on them in various ways to that extent.

As another feature of Warwick's management, there is a very close inter-relationship between senior administrators and small groups of senior academics who are working in the centre, i.e. the Pro-Vice-Chancellor and the Chairman of the Faculty Board.

In recent years, some institutional managers in UK universities have expressed the view that 'the balance of power is shifting from the managers to practising academics' [THES 4/6/99]. Regarding this, **L** feels that as far as Warwick is concerned, academics certainly have power "in the effect of transfer market and their marketability" within their subject areas.

4-3 Institutional Reaction to the Government's Proposal

EXPERIENCE

Warwick has been in continuous discussion on the system of research assessment since its first announcement in 1985. According to **M**, since the RAE has

undoubtedly become an important element in creating a league table for research that profoundly affects public awareness, the university has taken it "incredibly seriously" as a leading research-oriented university. **M** says that the university has "got tougher" through the past four exercises. Reflecting on the first exercise, **M** comments:

> Many universities didn't take the first exercise very seriously, (but) I did take it seriously and I chaired a small group that read through all the departments' returns, interviewed Chairs of the departments, rewrote departments' returns and so forth... I did it with a man called XX, who was then the Academic Registrar, he and I sort of master-minded the exercise, and of course, Warwick did extremely well in it. And it was also a sort of very significant moment, because nobody realised at that point that Warwick was on its way to become a major university.

The university had adopted the same strategy in the 1989 exercise, though the institutional policy was slightly tightened:

> Certainly in 1989, on the day after we had a letter (from the UGC), I got the Vice-Chancellor to sign a letter to all departments, saying that 'unless you got (the rating of) 4, then the university is going to review the department', and we have done that every subsequent year... and it was a very fundamental thing to have done, because it meant that... most universities were glad to have got (the rating of) 3s, but what Warwick really said was that 3s were not good enough, it had to be 4, and if you did not get 4, then there was something wrong with you...

These policies in the 1980s were developed in subsequent exercises. The university pursued its strategy more drastically in the 1990s, as **M** explains:

> What we did intensively in 1992 and 1996 was to vote a figure which could be used to generate an early retirement in order to bring in new blood or to make redundant staff who were not performing satisfactorily.

However, there has been a great deal of controversy over the university policy towards the 1996 RAE that encouraged all departments to include the maximum number of staff in their submissions, with some departments attributing the main cause of their downgraded ratings to this new university strategy.

For the RAE 2001, the Vice-Chancellor set up the Central University Working Group in 1999, comprising Head of RDSO, Academic Registrar, Pro-Vice-Chancellors and Deans. This group conducted some surveys to examine whether or not the university should limit the number of the staff in making the submission. The intention of the group is to discuss with departments the best tactics for them.

On the whole, all departments are currently very research active, and 90% of the university's academic staff is located in departments with a top research rating of 4, 5 or 5* in the 1996 RAE [Table 4-3].

MANAGEMENT STRATEGY

At the centre of the university, there are several committees charged with research activities, e.g. the RDSO, the Research Generation Committee, the Research and Teaching Development Fund Committee and the Estimates and Grants Committee. In providing information about the RAE, the RDSO plays an important role in co-ordinating the submission for the RAE with the Vice-Chancellor and Chairs.

The tactic adopted for the RAE is to decide how to maximise the chances of

Table 4-3 The Outcomes of the RAE 1992 and 1996 at Warwick

***Each initial of the department does not relate to the exact name of the discipline.**

Department (coded anonymously)*	Rating 1992	Rating 1996
P1	3	4
B1	5	5
C1	3	3a
X (The detail is shown in the section 4-4.)	5	4
M1	5	5*
S1	5	5
C2	5	5*
E1	5	4
L1	4	4
E2	5	5
Y (The detail is shown in the section 4-5.)	4	3a
A1	3	5
S2	5	5
B2	5	5
E3	3	4
F1	4	5
G1	3	4
I1	3	2
C3	2	4
H1	4	5*
H2	5	4
P2	4	3a
F2	5	5
T1	4	5
I2	4	4
AVERAGE RATING	4.37	4.4

each department in improving their ratings, and to balance those with the number of staff who will submit their research outputs. In order to successfully achieve this, **L** stresses the importance of recruitment:

> What we are much more proactive in is our approach to academic staff recruitment, by establishing the Search Committee. And we do a systematic search in order to find the best candidates both in the UK and overseas to see if we can attract the best candidates for the job, and if we cannot find the best candidates, then we will re-advertise the post.

Since there are a large number of "head-hunting" exercises by all universities, Warwick spends a good deal of time persuading internal staff not to move to one of the rival universities, while head-hunting some academics in other universities to come to Warwick. This is a very time-consuming process. **M** describes their long-term policy:

> Preparing a university for the RAE, you may be thinking in the short term tactically about what you do for (the RAE) 1996 or 2001. But if you have any sense, you would be thinking about 2006 and 2010 now, because it is a question of appointing really able young people who will be in ten years time producing really distinguished work.

Another important issue in Warwick's strategy is to look at "the conditions of academic life" in the university, i.e. availability of study leave.

GENERAL PROCEDURE IN-BETWEEN EXERCISES

As soon as the Managers gain any information in Circulars from the HEFCE on the next RAE, it will be disseminated among departments after the contents have been

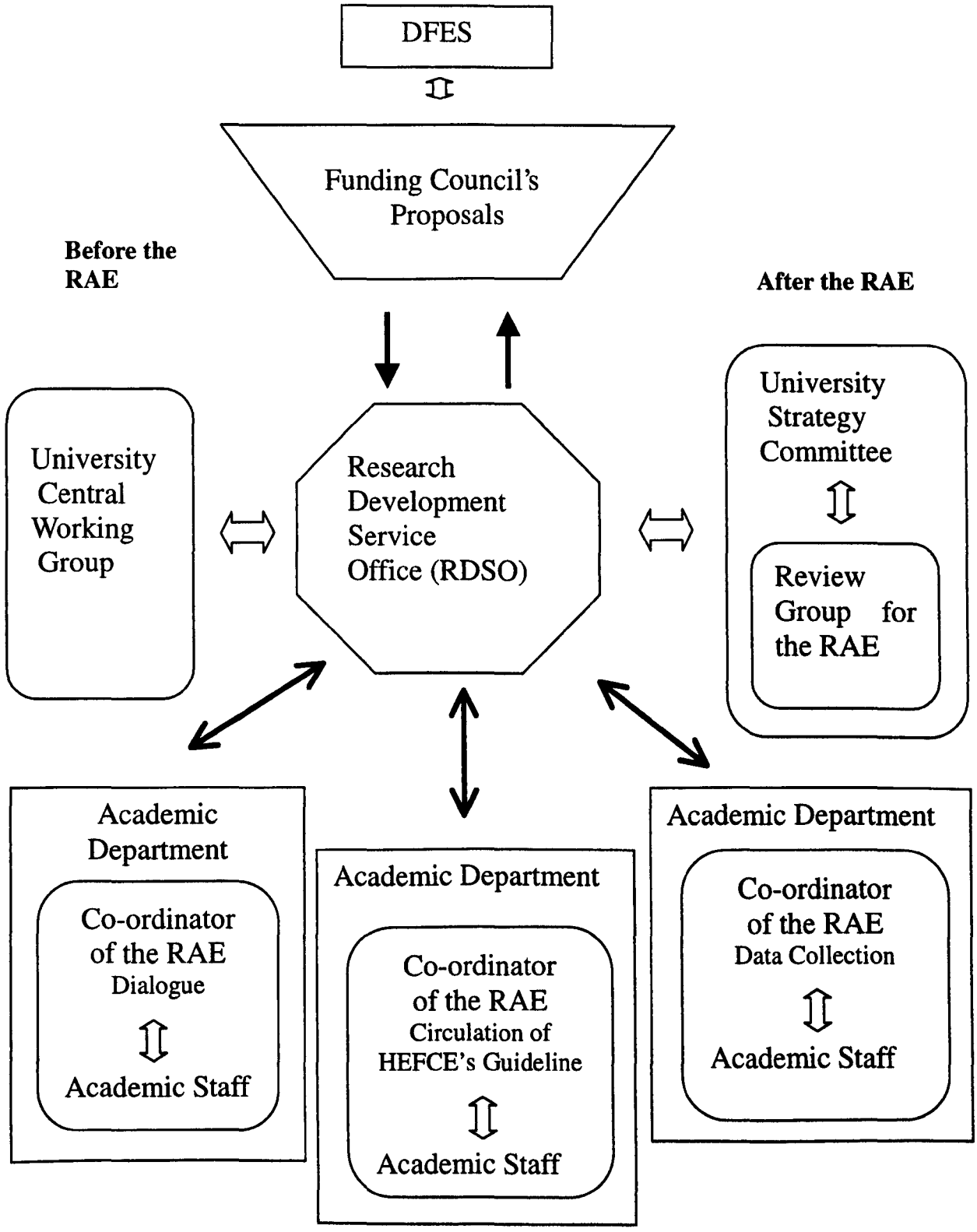
considered by the Managers. It is the RDSO which co-ordinates this process. As the Head, **L** elaborates its procedure:

> What we tend to do is to look at the rules for the next exercise. There is a reality. We are all very pragmatic in our approach. These are the rules, how are we best going to get higher scores in this competition, and how does that map into the strategic aims for the university, and let's prepare accordingly, then when the results of the RAE are available, we analyse and determine what they tell us about our departments and then we have a discussion about how our resources should be deployed appropriately to strengthen each of the departments.

Since poor RAE scores would certainly impact on the morale of the academic staff, the university takes immediate action to review and strengthen those departments which gained low grades. It is the Strategy Committee which undertakes this role, and some departments are advised by the Committee on the improvement of their performance. The Committee sets up the Review Group in order to report on their reviews back to the Committee [Figure 4-4]. If the Committee makes a decision on a department's future, a series of external experts are then invited to these reviews over the following year. When a confidential report is produced, it is sent to the University Council, and it later comes back to the Committee. **L** explains general decisions which have taken place in the past:

> Normally what happens is a) a department is re-structured, b) happened in nearly all cases, extra resources are allocated to each of the departments to hire new staff, coupled with early retirements of some other staff to make room for new appointments [audit].

Figure 4-4 Institutional Reaction to the Government's Proposals at Warwick



In addition, the Strategy Committee asks all other departments to produce a research plan for the next 4-5 years to the next RAE to identify their current priorities, needs and research interests, while having a dialogue with those departments. In each case, according to **L**, their plans have to be finally agreed by the Strategy Committee. These plans are then handed over to the Estimates and Grants Committee which determines the staff resources and other allocations of the funds in consultation with each of the departments.

LIMITATIONS

Although **M** repeatedly celebrates Warwick's overall strategies towards the RAE, it is acknowledged that there are several limitations on its practice:

> What you see is that... you have got a lot of universities that have not got any research money at all, and because it is a sort of competition all the time, you have some universities who are always in a sense apologising for failure. Now, it is very hard to know how you cope with this in a mass HE system because you cannot spread research around all the universities, and that is why in a way that the purpose of the RAE has changed... When it started, it was all about the rationalisation of the departments... so that they can have a strong research base. Now it has very much become a way in which the UK can generate a few world class universities and now it has also become something about accountability, for the expenditure of the research money. It has become a way of sorting out ... using an English expression, 'the sheep from the goats', and in that aspect of the policy, I think it has now exhausted itself.

As another key defect, **M** expresses that the present system has not encouraged the enhancement of institutional missions, as criticised nationwide [e.g. THES 21/3/1997]:

> What you have got now is good universities or bad universities, good universities or not so good universities, what you don't have is huge differences between the way universities approach their community or those kind of things, and that is because we are over-regulated by the system, because it is so important in terms of money as well as prestige, and because research is always, in any university, going to be very important.

ALTERNATIVES

As a solution to the defects of RAE, **M** suggests the re-designation of institutions:

> What happened is because the government doesn't have the guts to actually say that 'there are 10 research universities or 15 research universities', everybody is forced to compete every time, you will be criticised if you made this decision, but what they should be doing now... I think it would be much better for the government to say, 'if we look at these tables, there has not much been a big change over the last 2 or 3 RAEs, so why don't we throw away the RAE', and just say 'there are recruitments in research universities, and we fund them accordingly'.

The other solution suggested by **M** is transferring all the R-line of HEFC funding to the Research Councils so that the university could obtain a very large overhead fund along with their grant money, though "it would make a university system extremely unstable".

Overall, both Managers are well-prepared for the RAE, with their own strategies including tactical and forward thinking, though **M** has realised the limitations of the system.

4-4 Departmental Reaction: The Case of Scientific Department X

As one of the oldest departments in the University, Scientific Department **X** has an international reputation for research activities in a particular area of the discipline, including one of the largest research groups in Britain. There are about 30 academic staff supported by 40 technical and secretarial staff, and more than 100 research fellows and research students. The following is drawn from an interview with one of the departmental co-ordinators for the RAE [**S**].

EXPERIENCE

The first two assessments were not taken seriously by the department, though in both cases Department X performed "reasonably well". It was from 1992 that the department began to consider the outcome of the exercise more strategically. In fact, their rating was improved from 4 to 5 in the 1992 RAE, including a significant number of post doctoral research fellows.

For the 1996 RAE, Department X scrutinised all evidence available for each element of the assessment, e.g. the number of papers, the research grant income, the research student numbers. Following the panel's criteria as well as the university's initiative, the department submitted its research outputs of all members of staff, including all the post doctorates and research fellows. However, according to **S**, the criteria in this discipline had become "a little stricter" in 1996, and as a result, it was downgraded from 5 to 4 in that exercise. **S** describes their reaction at that time:

> The department took that (result) very very seriously... big upset, because our impression was that everything was improved. And the reason we went down was

> because of the tightness of the definition of international excellence. (That) meant that our proportion of international to national was too small. Nobody, according to the assessors, was judged sub-national, (among) 3 categories for staff: international, national and sub-national, but we had too small a percentage of international, because we put in all the research fellows and the post docs.

Afterwards, it was felt among staff that the department would have gained a better score if the number of entrants had been limited.

For the RAE 2001, therefore, the department has modified its previous policy in order to ensure that the members of staff who are involved in the exercise contain the right proportion of international researchers. Four members who were judged 'national' in the 1996 RAE took voluntary redundancy, whilst six members of staff were newly recruited, some of whom were judged 'international' in the same exercise. In the RAE 2001, Department X intends to achieve the highest rating, focusing on head-hunting of internationally excellent researchers and early retirements of the weaker staff.

According to **S**, all members of staff have realised that gaining a high score in the RAE is vital not only for the academic staff, but for the whole department. Referring to the distribution of QR money, **S** insists on the importance of the RAE in science:

> As long as we have the dual funding system, as long as we can protect QR money from the HEFCE and stop the Engineering and Physical Science Research Council (EPSRC) steering it away, there has to be a way of distributing QR, and at the moment, the RAE is probably the best way.

For this reason, most members of staff are "very positive" in general, according to **S**, and they have not expressed any negative response. Also, **S** heard that most of the staff had

found the previous system conducted by the UGC "quite stressful in some way" and therefore, they are pleased to have a new approach.

STRATEGY

The co-ordination is basically controlled by the Chair of the department, supported by various members of staff. For instance, there is a member of staff who is particularly responsible for research, working with individual members of academic staff to collect their papers and present the statistics. The department has also set up a Research Committee, comprising some senior professors and some intermediate and junior members of staff. This Committee seeks information from each member of staff on their research grants and contracts, presentations at international conferences and national conferences, the membership of the national and international committees, editorial work and the visitors to their research groups.

S describes the department's strategy:

> We aim to optimise the department's results. But optimising the department's results is in two directions, that is, first of all, the status, getting as high a grade as possible, 5*, or 5. Second is the need to generate the maximum income... from the RAE. And those two don't always go in the same direction and you have to compromise between the two.

For the RAE 2001, a group was created to co-ordinate the submission, scrutinising four papers from all members of staff, as well as updating their data. The group also asked staff to provide the next 10 best papers that might be considered alongside the four items. Within the group, there was a core group, comprising three

senior members and two junior members of staff. It was with this core group that the department prepared the draft of RA5 (research structure related issues) & RA6 (general observations). One senior member of the core group wrote a commentary and circulated it to the rest of the members. It was later sent to the main Research Committee and to the Vice-Chancellor. Apart from this, with the Vice-Chancellor's support, the department conducted external assessments in 1998 by inviting three senior professors from other UK universities who had international experience, seeking their comments on departmental research activities in order to review the present state and the future directions of the department.

INTERACTION

At the national level, the department has been involved in the discussion within a national institute for this discipline, with regard to the RAE and research in general. In addition, most individual members have links with the EPSRC, though they would not particularly support the EPSRC in its attack on the RAE [THES 3/4/98]. The department maintains a dialogue with the Chair of the RAE panel at the Standing Conference of this discipline.

In connection with industry, a variety of the research groups within the department collaborate with the private sector. With other HEIs, no particular collaboration is established for the RAE, however, a regular meeting is held every six months with three other strong departments of the same discipline in the Midlands: Leicester, Nottingham and Birmingham, to discuss their research and teaching collaborations.

DEPARTMENTAL AUTONOMY

S clarifies the limitation of the department's power in funding, due to the structure of Warwick:

> We don't have a devolved budget, therefore much of our activity is (appointing) a new member of staff, equipment, consumables. We are continually bidding to the central committees, rather than simply having a flow (of money) to us based on our performance.

As far as the RAE is concerned, however, **S** feels that "the power is always in practising academics", since the managers in the centre are only helping them with technical aspects of the matter and the issue of how to select four best papers is left to academics' discretion.

4-5 Departmental Reaction: The Case of Non-Scientific Department Y

As the largest teaching department of its kind in the UK, Non-Scientific Department Y comprises over 30 full-time members of staff and a large number of part-time teachers. In the 1980s, there were 17 members of staff only, and the department did not grow considerably. In the early 1990s, the expansion of their graduate programmes together with a merger with another department generated an increase in new members of staff.

The following is derived from individual interviews with the Chair of the Research Committee within the department **[N]** appointed for the RAE 2001 and the previous Chair of the department **[O]**.

EXPERIENCE

Prior to the introduction of a system of research assessment, no formal review of research was conducted in Department Y, except the occasional visits from the UGC on a faculty basis. During the first two exercises in the 1980s, no serious attention had been paid. This was because in those days, most of the co-ordination was undertaken by the centre, not by the department. Since the 1990s, however, their response has changed dramatically. **O** describes their past experiences:

> Over time it has become more and more integrated into the operated routine of the department... When it was first set up in the 1980s as suggested, it was not seen as crucially important as a central exercise. That really certainly kicked, as far as I was aware, in 1992 when it was treated very seriously indeed. Once you got into the situation in 1992, it was (directly) linked with the financial outcome, clearly you operated in the university context, and you (began to) take the issues seriously, (and) do a lot of forward thinking.

In the 1996 RAE, the department was unexpectedly downgraded from (the rating of) 4 to 3a, though **O** says that "We just followed the panel's criteria and the university's strategy". **O** explains that it was suspected within the department that this unfortunate result was caused by the university policy to an extent:

> That is because, we spent a large amount of time on RA5 & RA6 in the last round as recommended. However, we were told that RA2 (Publications) was more important and the decision was largely based on it, despite having taken considerable efforts for RA5 & RA6.

O also criticises the university's institutional policy towards the 1996 RAE:

> I think the position the university took was a mistake, (their assumption) 'because it is a research university, everyone is engaged in research', that is clearly not always the case, there are people who are not engaged in research, they don't have the required number of publications, so I think whatever the department did, they (the centre) essentially styled it.

STRATEGY

Until recently, there had been no committee within the department which was particularly concerned with research assessment, and its administration had been conducted through the department meetings and/or through individual discussions between members of the department. At the end of the 1996 RAE, it was mooted to have a more devolved structure with more committees and more delegation of power within the department. Since then, several committees have been established which affect the decision-making of the department. In this discourse, the Research Committee was created in 1996 in order to co-ordinate the departmental submission for the RAE. Members of the Committee include some professors, some readers and some other members of staff in various areas of the department. The Chair of the Committee, appointed for the RAE, N describes the general procedure for the RAE:

> Throughout the whole period, we have been very consciously engaged in monitoring our position. There is a database that has been built up of all publications of all members of the department, and each member of the department has been interviewed about their research, about their publications, about which four items they feel are the strongest items, before the items have been discussed and gone over, and we have tentatively selected four, but until we see what the final selection of publications is,

> some of them are obviously still in prospect, we won't be sure... whether they will be published by the deadline, so we have been very sedulous in collecting information for the database.

Other than this, since quite a few young members are working for Department Y, there is a formal policy of 'mentoring' for the RAE 2001, and each young member of staff is assigned an official mentor, a duty normally undertaken by senior members of staff, to assist in their research so that the department can improve its overall rating.

Thus, the Committee collects as much information as possible about all their activities, "apart from the facts about what the publications are", according to **N**. As a main strategy, the Committee intends to achieve a high profile in research by recruiting promising figures as well as recommending some low-performance academics to leave the department.

The difficulty that the department encountered in the 1990s was in the treatment of a significant minority of the staff, i.e. whether or not the department should include them in the submission, since they would undoubtedly affect the department's RAE performance. For instance, some members who were not involved in the 1996 RAE exercise might start to produce brilliant research at a later stage. Another key issue discussed within the department was about negative impacts of the RAE on teaching, since their commitment to teaching was known for its strength.

In terms of feedback, for instance, there was a meeting after the 1996 RAE in this discipline across the country where the panel explained the detailed process of their judgement. According to **O**, though the meeting was "quite instructive", the information was "limited in some way", since the department could obtain only a short paragraph of the comments from the panel. Within the department, informal feedback was also

conducted by the Research Committee, which was mainly based on the comments provided at the national meeting.

Apart from this, the department conducted a strategic review in conjunction with the university which included two external reviewers. However, since it was mainly organised by the centre of the university for its own purpose, not so many academics took notice of it.

DEPARTMENT'S VIEW

According to **O**, since the department regards the exercise as an established procedure, no particular discussion has been held on the principles underlying the RAE. As the Chair of the Research Committee, **N** expresses departmental perspectives:

> We have no choice. We have to get on with it. We do the best we can, since funding depends on it. I think some people still resent it, but most people have just accepted it as a fact of life whether they like it or not. I think lots of people probably would not particularly appreciate this exercise. Perhaps some people would gradually admit that there has to be some mechanism for doling out research money. This is, perhaps, not worse than any other mechanism...

As a positive effect caused by the RAE, **N** also refers to an increase of productivity in research:

> We have gone quite a way towards relieving some of the tensions between teaching and research, and reassuring people that we really do want them to be doing their research, and it is very important for department matters. We take a pride in it, so there is a positive attitude towards research.

INTERACTION

No particular connection has been established with central government except through the formal route via the HEFCE. Some informal contacts exist with the panel. In the context of the RAE 2001, one member of staff was sent to attend meetings where the panel revealed part of their strategy and to report back to the Research Committee. Thus, the department pays attention to the general views of the panel and their implications.

The department has no particular link with industry or with other HEIs, though some academics have relationships. In terms of the RAE, O makes reference to the fact that they have done, though it is one-sided:

> We did, in the last (1996) exercise, look at what Manchester and LSE had done in the previous round, to see if there was anything we could learn from them. I'm not sure if there was anything worth looking at. Anyway... we certainly wouldn't want to talk to Coventry University, in a sense we want to talk to Birmingham. In some sense, it is a rival but we have a good relationship, in some sense they are rivals, so we wouldn't want to... We might go further afield... within the UK.

At the international level, though the department is well-known for its international research partnerships, N says that "what impact would have been made on the RAE is uncertain", whilst these connections contribute to the research culture of the department to an extent.

At the organisational level, the representative of the department meets with the Pro-Vice-Chancellor, while the Head of RDSO comes to attend the Research Committee

meetings, to exchange their views and ensure institutional strategy. As it is closer to the RAE, more intensive discussions are held between them.

DEPARTMENTAL AUTONOMY

Regarding the power balance between the centre of the university and the department, **N** comments:

> In some respects, there is a tendency towards devolving management to the departments, but in another respect, the university still retains a grip on things.

On the other hand, **O** comments that "the balance of power has been considerably shifting to managers", and no power is left with the department:

> The way in which the university organises things is excessive. In general, there is a continual attempt to erode departmental autonomy, and the problem is that while increasing the central control through various meetings, the university has not paid any serious attention to individual disciplinary knowledge which individual departments have obtained from various meetings with their panels.

O insists that the university's role "has to remain in co-operation with the departments", rather than seeking to impose their solutions.

4-6 Individual Reaction: The Case of Scientific Department X

PERSONAL EXPERIENCES

The involvement in research assessment varies from individual to individual. A

senior member of staff [**A**] who has worked in the department over the last three decades has experienced all the past exercises of research assessment, whilst two other members, a younger member of staff [**B**] and a senior member of staff [**C**], have been involved in the assessments since 1992. A junior member of staff [**D**] who came to Warwick in 1997 underwent the 1996 RAE in his former institution for the first time in his academic life. Most of the informants had paid no particular attention to the first two exercises in the 1980s, as those were basically co-ordinated by the centre of the university. **A** and **C** have become main co-ordinators for the RAE since 1992.

Their initial reactions were more or less positive towards the general idea of research assessment. Having worked in industry before moving to Warwick, **D** felt that it was "something almost inevitable" and it was also "important to know the relative standing of the department". Likewise, "it didn't seem unusual at all" for **B**, since there were regular internal reviews in his previous institution in France.

IMPACTS ON THEIR RESEARCH

B says that "the RAE certainly needs to have more regular intervals to give a fuller picture of research activity" in the department. Except for this, most informants insist that the RAE has not seriously affected any aspect of their research.

As a matter of fact, however, as originally intended, the rationalisation of scientific departments has taken place year by year. In this discipline, according to **C**, the total number of institutions has been fixed and a small number of larger departments are expanding, while more than 10 smaller scale departments had to cease their operations. In connection with size-relevance, **C** comments:

> In science... you don't have any big departments that are rated weakly, weak ratings, 2

> or 3b or 3a are all small departments. We are about 30 staff, When we won 5, we were the smallest 5, and all the 5s are... 30 plus right up to 200.

As a result, those who used to work for lower-ranked institutions and/or those who low-performed in institutions with high profiles have lost their jobs. This was, according to **A** and **D**, partly associated with the influences of the RAE, though there were other reasons as well. Some possible effects are indicated by informants as follows:

Research contents

In **B**'s view, the RAE might indirectly lead to people being conscious about the contents of papers written by those in 5* departments, since those are certainly regarded as the 'best' in the community. As another example, **B** points out that some academics may modify their research contents if they consider taking time off for challenging long-term work, e.g. Nobel Prize experiments, which would require a number of developments without drawing out any apparent result. **B** also mentions a risky case where one is engaged in a controversial area which is relevant to public information, e.g. the effects of mobile phones on human health. **D** refers to a possible impact on interdisciplinary research, since **D**'s field is on the edge of the subject area, the best journal to publish his work is not necessarily the one which is in the field of the discipline:

> There is a problem of marrying up, trying to get the best audience against trying to get the research to the place which has the most impact on the RAE, those two things are not necessarily compatible.

Research pattern

A's patterns for all research activities - publication, presentation, applying for grants - are affected by RAE criteria to an extent, though those would not encourage him particularly. **B** explains, since the length of papers in most prestigious journals of this discipline is only four pages long, he always aims to publish in those journals regardless of the preference of the panel. Meanwhile, most informants acknowledge an overall tendency to 'rush into publishing'; to collect a number of publications before the study is completed, as is frequently pointed out nationwide [THES 16/6/95, 3/11/95, 8/3/96, 5/4/96]. This may lead to 'short-termism', according to **A**, though it has had a marginal effect in this department. On this, **B** insists that "people should not publish straight away, but they should do eventually".

Academic freedom

According to **A**, there are two factors in science that would infringe academic freedom to an extent:

- Scientific departments, by their nature, require minimum infrastructure for the right performance, therefore there are some aspects which members of staff are unable to be engaged in.
- One does have to have a level of strategic planning of the department.

Besides, **A** says that there are always "fashions" in funding, and "that can drive people in different directions", therefore it is impossible to obtain any financial resource if their areas are no longer fashionable.

Even within the institution, **B** suspects that if one started to move outside the

mainstream of the discipline, there might be "a strong push" from the centre to return to the guaranteed areas where s/he can certainly obtain funds. In reality, however, **B** explains that, although some of their work is "speculative", almost all of the work is already accepted as being valuable by the community, since 20 to 30 groups in the world are working on the same areas. Therefore, in **B**'s view, academic freedom is retained as long as researchers maintain the right balance between the speculative and the guaranteed.

IMPACTS ON OTHERS

All interviewees have perceived an increase of administrative workload over the last decade, though most deny that this is caused by the RAE, while stressing the workload for a "substantially far more demanding and time-consuming" assessment of teaching quality conducted by the Quality Assurance Agency (QAA).

D points out an indirect impact on teaching, since the staff-student ratio is basically determined by the score in the RAE. In terms of public awareness, **A** assumes that when the publicity is revealed, it will influence students' choices to an extent.

Relationship with colleagues within the department

According to **A**, while research active staff are more highly respected, the RAE has also impacted on some of those who are less research active. In **A**'s view, the RAE certainly leads to more people "being inclined to be more 'prima-donnas'", and for those who are less research active, "it probably exaggerates a sense of isolation". **B** and **D** also feel that a certain tension has been created within the department, though that had existed to an extent prior to the introduction of the RAE. **A** presumes that the RAE has reinforced this aspect to some degree, since "people who are not performing as well as

you expect more often get reminded (that) they are not performing well".

On the other hand, **D** indicates a positive effect in that the RAE leads to stronger research activities within the department and the interaction between members of staff has "become somewhat more active than before".

Relationship with other academics in other institutions

Across the nation, it has been observed that the RAE has encouraged the move of academics to work in institutions of higher profiles [THES 31/7/98]. With regard to this, most interviewees comment that academic moves have been "speeded up a bit" since the introduction of the RAE.

As to the general relationship with other researchers in other HEIs, most informants state that they have found no particular friction with those outside the department. **D** strongly denies any possibility of considering the spread of credit for his work by working with researchers outside the department, since "scientific reasons always come first" at any time in his mind. **B** doubts any probability of matching their specialism to those of the panel members, as researchers are not formally informed who are on the panel until a year beforehand.

On the other hand, one negative aspect was clearly acknowledged by **B** in the 1996 RAE:

> (An) interesting thing is if you look at the paper, there are two of you from Warwick, some people from outside, that paper was viewed less favourably than something just done by people from Warwick, because they say, 'some of this work has not been done in Warwick', that discourages people from working with each other, or from talking to each other...

This kind of judgement, according to **B**, may lead people "to be more insular" and "make them more inward looking".

As another impact on the research community, **A** points out that, since one of the key criteria in this discipline is the number of staff in the department who are judged 'international', the RAE "really favours more senior people" who have had longer academic careers to establish an international reputation.

RAE MECHANISM

Interval

No interviewee disagrees with the current RAE interval as long as "it is not less than 5 years", since most scientific research finishes within that period. For example, **B** explains that "most of the EPSRC grants run over a 3 years' period, therefore all our research has to start and finish within 3 years". According to **B**, the interval set out by the EPSRC is "a far more crucial factor" than that of the RAE.

D indicates one possibility as a negative impact of the RAE interval in that "if you get an RAE rating which you believe doesn't reflect the department's standing, you then have to wait for another 5-6 years before you get a chance to improve the situation". More essentially, **D** indicates the lack of consideration of the citation process in the RAE, which is often used by some Research Councils (along with other measures):

> Some research does have immediate impacts, but the majority of research influences their fields in the next 5 or 6 years. If you look at how papers are developed in terms of citations, the first two years are quiet, no one has seen it, then the true test of the

> paper is in 3-6 years. Basically ordinary papers peak and stock in those years and fall off, (while) people who made real impacts still continue to grow.

In this respect, according to **D**, the RAE's timing for judgement is still too early to make a genuine decision.

The number of papers for submission

A supposes that the idea of four papers is "what you are interested in is quality not quantity". However, **C** explains its main critiques:

> The present system of evaluation of many science subjects, you will see in chemistry, in physics, in engineering, in computer science, in psychology, is basically fraud. What they ask us is to produce 4 papers. And you will see... a member of staff who produces 4 papers in 4 or 5 years. This is not very productive. I have personally, in the last 5 years, something like 50 papers, and I have got to pull only 4 (papers) out of those 50, and how do I do it? I don't know, what we would like is to show our performance... Yes, the 4 best papers, but we also like to demonstrate our productivity, because that is important. If those papers are in good journals, well-refereed, 4 papers out of 50 is totally different from 4 papers out of 5. Even if those 4 papers are really good, there is a difference in productivity, and science is about not only excellence, but about productivity.

As a solution, what **C** suggests is that in addition to 4 papers, "a sort of second sheet" should be attached to list all other papers so that the panel is able to assess each researcher's productivity at the same time. **A** and **B** also support this, since under the present system, the outputs "might appear to be more or less equal" regardless of their

productivity. However, **A** is afraid of the fact that "if the number of papers became bigger, it would make it far more obvious 'who is generally research active and who isn't'".

In terms of the method of counting papers, **C** wonders if the present system is sensible, as "when people are allowed to count their papers, they tend to be taking their papers and dividing them into a small portion of pieces to increase their counts". As a solution, **A** suggests that "one can skim a set of titles of papers where those are published and get some ideas whether somebody is putting a small amount of information into lots of publications". In reality, however, **D** comments that "the process limits the number", therefore '4' is a reasonable number for the panel to read through.

Other elements for submission

One of the factors which is counted as an element of the RAE is the manifestation of people's reputations which emerges through invited talks at conferences, prizes, being invited to edit journals, organising conferences and serving on international committees. According to **A**, it is a very valuable piece of information, as "then you see what the community thinks of you". On the other hand, **B** wonders whether some of them are necessarily signs of 'strong research', since "somebody else might want to quietly work without going anywhere".

Panel system

In terms of the composition of the panel in this discipline, **A** has no objection, while **C** feels that it is restricted, and "it is difficult to cover the whole spectrum of the subject". **D** supposes that since the panel is limited in size, it would be enormously hard for them to accurately take each piece of work into account. Besides, in terms of

selecting panel members, **A** found a cynicism in that they are almost all drawn from 5* departments.

Another noticeable critique of the panel is a lack of total clarity, and all informants express their hopes to obtain more information on the criteria adopted in the panel's judgement. For example, **A** often wonders how he should identify his 4 best papers for submission, as "people have different views about what is best". **D** simply states that "in principle, to a large extent, the quality of a piece of research is not an objective thing, it reflects their own prejudice of whether this is good or bad". As for this, **C** points out a great advantage of having a panel member within the department:

> Our impression is that we were just below (the rating of) 5 border line (in the 1996 RAE). It was something like 4.91, and they (the panel members) have the scale. But if we don't know that beforehand, we just adjust ourselves accordingly. And there is a feeling in all the communities that if you have a member of staff in the panel, that information can go back to your department. So 10 or a dozen departments have information that we don't have.

In the process of making their judgement, **B** suspects that the panel "plays the numbers game", looking at the journal quality and the reputation of the person rather than the specific paper, since "the panel has not ever commented on each specific piece of work". Due to "vague criteria", **B** also criticises how a number of academics "interpret the rules". However, if all the inside information is disclosed, **A** supposes that "it is hard not to be slightly influenced by that". Hence, it is a matter of the degree of openness, because "if the system is too open, then people are constantly appealing and arguing".

In terms of measuring 'international quality', **C** suspects that the panel tends to judge 'international' quality only by looking at the titles of the journals in the references. **B** also questions the correctness of judgement on international players:

> If you could think of famous scientists like Stephen Hawking, who are clearly internationally well-known, who have not done anything for the last 4-5 years, you say they are no longer international scientists, even though they were clearly famous in the past.

Treatment of interdisciplinary work

According to **B**, since most members in this department are engaged in work which is placed on the edge of the genuine discipline, it is claimed that "there should be more flexibility and chances to take interdisciplinary research into account". In their view, the procedures here have not been improved, e.g. the ability to gain opinions from outside the panel. For example, **A** particularly criticises the case that the panel members are given papers from completely different fields, as "different fields function in different ways".

ALTERNATIVES

According to **A**, as scientists are basically pragmatic, most of them would expect that "the assessment is basically here to stay". Yet, the following suggestions were made for improving the present RAE.

It should:

-give those who are at the bottom a chance to move around the league table.

-remain a peer review.

-be slightly more transparent and balanced.

-arrange more concrete targets by issuing a detailed guideline.

-reflect on the appropriateness of the previous RAE judgements over a period of time.

-take place less frequently than now.

4-7 Individual Reaction: The Case of Non-Scientific Department Y

PERSONAL EXPERIENCES

A newly appointed young member of staff [**E**] is going through the RAE 2001 for the first time in his academic life, while two senior members of staff [**F** & **G**] had experienced four research assessments at Warwick, though they did not take them seriously in the first two exercises. Another senior member of staff [**H**] who came to Warwick in 1994 participates in the RAE from the 2001 round.

Their initial reactions to the RAE vary, depending on their stances on 'being academics'. When **E** first heard of the RAE, he was "incredulous to some extent" and wondered "Why bother? How do you evaluate the quality of research in an objective way?". Since then, however, he has been conscious about producing '4 good pieces' for the RAE in order to maintain his job. **F** and **H** show rather realistic views. At first, **F** thought that "this was something that was necessary and unavoidable to do", since he did not appreciate the previous funding system. Yet, at the same time, **F** wondered how it could be operated in practice, at both national and organisational levels. Meanwhile, **G** had found the system sensible during the first two exercises, since he was told that its original intention was the concentration of limited financial resources available in science and that it would be applied to only scientists. However, when it unexpectedly began to be applied to social sciences and humanities in the early 1990s, **G** began to

wonder if it would be truly useful, as "nobody took any notice, and you did not get any pay". Since then, **G** has become "strongly hostile to the RAE", since it "is going to have different effects" on the bureaucratic control of academic life.

IMPACTS ON THEIR RESEARCH

Research contents

E basically feels that he has freedom to conduct any kind of research at present, though he has to be more conscious about targeting audience. **F** acknowledges that one of the specific impacts is that "the discipline has become somewhat more economic-based". Referring to a limited number of bodies such as the ESRC which have their own priorities in providing large research grants, **G** regards the current academics' relationship with the panel and with those bodies as a 'triangle', and in this sense, the RAE is not necessarily the direct influence.

Research pattern

F has found no difference in "what anyone else had been doing before the RAE". **E** has become more concerned about two aspects of his research; producing perfect work within a certain time to ensure that it is publishable and maintaining the quality of research. **E** comments that, in this sense, the RAE has dramatically altered his research pattern, i.e. he seldom wrote any papers in the past.

On the contrary, **G** has "almost given up" what he regarded as 'research' since the early 1990s. However, as the impact of the RAE increases in the department, **G** has reluctantly undertaken "something more like research" since the 1996 RAE, "merely in order to be free from criticism from colleagues and the university", though that is not what **G** personally prefers to do.

More generally, with regard to individual behaviour towards research, **G** is "deeply suspicious about academics who don't publish at all". Yet at the same time, **G** is sceptical about the idea that "people should keep publishing until the end of their career to avoid disgrace", since "the intellectual productivity in non-science reaches its peak between 40-44".

As a departmental co-ordinator, **H** describes the overall impact on research among the staff:

> People do feel under a fair amount of pressure to get research out and to get a kind of research out that they feel that is wanted. That is to say, they seem to have a preference for journal articles over the chapters and books, and there is a sense of trying to place your research strategically for the purpose of the RAE and time it so that, the strategy and timing, logistical aspects are coming more forward than they would... Ordinarily, one's attention is focused on the substance of research, exactly the form and timing of its coming out would not be a matter of such concern... but this is a force for people to be much more self-conscious about placing and timing of research.

Academic freedom

As **E** recognises himself as not being "a controversial person", academic freedom is not particularly his concern. Reflecting on the past 20 years, **F** feels that "there is much less time for research", therefore he has become more selective in decision making. At the same time, **F** feels that there have increasingly been pressures from the university "to go out and get funding". In general terms, **G** stresses that "the RAE does reduce academic freedom".

IMPACTS ON OTHERS

From **F**'s viewpoint, "things are going on broadly as they were before the introduction of the RAE", though the decrease of the unit of resource and the staff-student ratio has affected his teaching. **G** acknowledges that he spends less time on teaching than before, and that is "not a welcome impact" for him. **E** also feels that teaching has certainly become less of a priority. **F** particularly refers to the neglect of the close integration of research and teaching, as from his experience, he feels that "research feeds directly into his teaching & supervision". With regard to this, **G** has heard that some negative responses are reported from students on the quality of teaching through the Staff-Student Liaison Committee.

All informants also comment on a substantial increase in administrative workload, though most of them deny attributing its cause particularly to the RAE, while stressing the workload for the "more time-consuming" exercise conducted by the QAA. **H** describes the current situation:

> Everybody feels that there is too much paper to push around. We spend too much time on navel gazing and not enough time getting on... It seems as if there is an assumption that time is elastic, they lay on more and more administrative reviewing tasks and you're somehow gonna find time without taking time away from substantive teaching and research... We should go for administrative minimalism... Every piece of paper across someone's desk should be very strong justification for the default position... (There) should be no paper to prove it is necessary.

Impacts can also be seen on public perceptions, according to **G**, in that there is confusion over the university role, since "the RAE encourages the view that its prime

role is research". Yet, **G** insists that "as far as society and economy are concerned, the prime role of the university is teaching, producing certain kinds of labour force".

Relationship with colleagues within the department

E is sympathetic about those who are unable or unwilling to publish, as "they can be exiled". In **F**'s view, "the RAE has set up new tensions within the department". As a positive impact, on the other hand, **G** has found that the RAE "did encourage a sense of team spirit that did not exist before", though **F** disagrees with this.

In terms of the effect of 'mentoring', which was introduced in this department in order to encourage younger staff, one of the young members, **E** has found it "not really effective", since "it can go too far", i.e. older staff also tend to benefit from it by including their name on the work of younger staff.

Relationship with other academics in other institutions

According to **F** & **H**, it is noticeable that there is "a much more rapid turnover of staff" in contrast with the 1980s. **F** indicates a nationwide positive effect in that "the RAE pulls up promotions and appointments", and above all, "younger people in their mid-30s are getting promoted much more rapidly".

Regarding the relationship with panels, although **F** personally knows most of the panel members, that has "no effect whatsoever". In **F**'s view, "They have the job to do. They are trying to do it as conscientiously as possible." within the HEFCE's framework. However, in terms of relationships in general, **F** comments that "the RAE does introduce an element of competition with academics in other universities". On the other hand, **E** is afraid that the RAE could alter the present nature of the research community:

> People do tend to think of a project with likeminded researchers... if you start thinking of any kind of joint projects, (with) people in the same field or in the same institution, the first question would be "Is this going to be useful for the RAE?". If it is, let's do it now, get it done, make sure it is good, then we can set a time, and you have to make sure it forces you to concentrate on your individual research. So the RAE can discourage inter-university co-operation to some extent, because you get more credit for individually authored articles, and it discourages people to some extent to do an edited book which you don't have much credit for.

This could also lead to a contradiction if one is engaged in international research in collaboration with those in other countries, as one needs to ensure that a certain credit will return to oneself.

Meanwhile, in G's case, the RAE has not influenced his relationships with those outside the department, as he does not belong to any particular research community.

RAE MECHANISM

Interval

The present length of a round is appropriate to produce 4 papers for **E**, though he feels that "the interval has to match what you submit" so that one can avoid any risk in being engaged in a long-term research project. **F** has seen no problem with it, as even in publishing a book, "there will be articles before, and these come out at different stages of the process", though, in some cases, research contracts which run through for a particular period will not be the same period of the RAE and therefore "the work is unable to be counted".

On the other hand, **G** particularly criticises the creation of 'short-termism', as "people are not thinking about writing the great lifetime work... they are thinking of 'four items'... you can't produce good work in such a circumstance". **G** recalls that "traditionally (there was) 5 years gap... there was nothing", and that much longer books by modern standards were written in the mid-1980s.

The number of papers for submission

E shows uneasiness about the length of research to an extent, as there is a tendency among some researchers to rush into publishing a part of their work which could be more extended. **E** also points out the inequity in producing 4 items for academics in different stages of their career; some senior researchers can publish without any difficulty because of their names, while younger researchers have no access to prestigious journals. **H** feels that "it is somewhat artificial" to limit the number of papers, since researchers have produced far more than 4 pieces. In **G**'s view, it is "completely pointless" to write the right number of papers merely for the RAE, implying that the amount of purely academic work has been undervalued.

Panel system

Concerning the composition of the panel in this discipline, **E** and **F** believe that it has been reasonably well-balanced in terms of subject areas, geographical locations, backgrounds of assessors, though **E** is not entirely satisfied with the fact that there are no younger researchers on the panel. **G** feels that the panel in the 1996 RAE was "dominated by retired academics, who have very biased and partial views in research".

As for methodology, all interviewees indicate a lack of transparency in its criteria and the panel's deliberation process, complaining that no proof has been

presented by the panel. **F** suspects that there might be "hidden criteria" behind those which were presented. It is also questioned by some informants whether or not the panel members have read all the materials they are supposed to assess, assuming that most panel members tend to judge by the title of the journals only. **E** is particularly critical about this tendency (if that is the case), as "good papers would not necessarily get into good journals".

Some informants indicate that academics are encouraged "to play the game just by the rules" to improve their performance, which may not precisely reflect their true performances. Due to this, **G** explains that the standards of the system have deteriorated, whilst describing academics' behaviours as "small efforts against the great wave of collapse". For example, **E** reluctantly admits the fact that some researchers would try to appeal to those on the panel by sending articles from journals which are edited by panel members.

Some informants also criticise "too much divergence in the results between the panels". **F** suspects that the FCs have not been able to control this inconsistency. **E** is also critical about the FC's criteria, since he found through attending RAE meetings organised by the HEFCE that "the HEFCE is interested in 'tinkering', but not really interested in getting rid of it".

Treatment of interdisciplinary work

Although the FCs have made some improvements in the treatment of interdisciplinary research for the RAE 2001, these have not satisfied those interviewed, who complain that the RAE still tends to undervalue those activities. For instance, **H** points out that "the whole assessment exercise has an effect of enforcing people to stay within disciplinary boundaries". As a solution to this, **H** suggests "to evaluate research

on a particular topic across the different disciplines", though she reckons that it is logistically unrealistic. **F** questions the probability of consulting other panels, since most panels generally feel that "gazing at other panels is the last thing they want seriously to get involved in". **G** suggests that the FCs "should withdraw their narrow boundaries like that assessment (RAE), and should assess whether it is good academic work or not good academic work in the field".

OTHER LIMITATIONS

Some intrinsic defects are pointed out by most informants. Firstly, as frequently expressed nationwide, since the system originated in science, some fundamental incompatibilities can be found when it is applied to non-science, as **G** elaborates:

> Scientists are quicker in terms of research periods that involve much more teamwork than people in non-science fields, and research in science is based on a department, and is not an individual activity. But that is not the case in social science, because people don't really make discoveries where the scientists do, we have a theoretical breakthrough which requires time and reflection in order to get achievements.

G also questions the necessity of a link to funding for the outcomes of research assessment in non-science.

> If you are studying Jane Austin, you don't need any resources at all. Even at a minor university in the world, somebody might produce a definitive excellent Jane Austin work. That is down to the individual ability and scholarship. You don't need any formal research selectivity in order to produce that effect... Relatively speaking, there

> is hardly any research money involved in social sciences. It is 'peanuts', compared with the natural sciences.

Additionally, **G** indicates that there is a tendency that people just want to be seen "to be being given official certificates" by being funded, though obtaining funds may not always necessarily be the case in non-science. **G** insists that the government has not realised the different demands in each subject for producing high quality research.

Secondly, anxiety exists in an uncertainty about the government's final objectives. **E** indicates that there is "a vicious kind of competition" in the league table, since "for Oxbridge, it is very easy to maintain their advantages", while other lower-ranked universities "will never be able to reach the top". In this sense, according to **E**, the system intrinsically contains unfair elements and "it could only work to reinforce the existing hierarchy". **E** also wonders whether the government aims at an equitable system or an elite system, since the present system is "too much compromised, half measured... too much for too little in direction". **F** comments on an increase of government intervention in the university's research, referring to the fact that "there was much more a sense" in the past with regard to the role of university and that "there was a certain amount of deference shown to them in the role of academics".

Thirdly, at the organisational level, limitations are found in institutional behaviour. **E** criticises the institutional process for not being clear when it comes to internal resource allocation. As far as he knows, "the money doesn't go directly to the 5* departments, but it goes back into the main account of the university", whilst individuals are not informed of the exact method of funding distribution adopted. In this respect, **F** feels that the university's practice is "too old-fashioned" and it is not rightly balanced.

ALTERNATIVES

No clear view was expressed about the future pattern of research assessment. However, for example, from a long-term perspective, **F** comments on the role of the university:

> We have to bear in mind that HE has benefited its society as a whole and it has benefits in terms of economic competitiveness, if the country is seen in the future... (by) the government's own level of economic growth and strengths in human capital formation, the university has an important role in that.

Here are some suggestions made by the informants for a better system of research assessment.

It should:

-at least give each institution a minimum level of funding to be able to conduct research properly.

-be less costly in transaction.

-be streamlined.

-be based on a small proportion of academics.

-be more transparent in terms of objectives and process.

-give more feedback.

-include more international input.

-be more genuinely international in its judgement.

-have a longer time-span.

4-8 Summary and Observation

As a leading research-oriented institution, Warwick University has regarded the national system of research assessment as one of the significant elements for improving and maintaining its reputation. Since the very beginning of its implementation in the mid-1980s, therefore, the institution has carefully conducted its own strategic scrutiny in order to achieve a high performance.

Throughout a round of the system, the centre of the university regularly interacts with individual departments, making use of its close communications through the RDSO and some internal Committees. According to Managers (**L&M**), with its long-term policy for staff promotion, the institution has been successful in recruiting promising academics, whilst recommending some members of staff who have not performed well to take voluntary redundancy. As a result, Warwick has gained fairly high scores in past exercises, and that had also contributed to an increase in public awareness towards the university. However, as a defect of the present system, Manager **M** comments that the system has not encouraged institutional missions, while creating a few world-class universities.

At the departmental level, both departments (X&Y) had begun to be seriously involved in the nationwide system of research assessment in the early 1990s. Both departments have developed their own strategies for maximising their scores, such as establishing a Research Committee in order to promote communication with individual members of staff, though they have not particularly shown any willingness to become involved in the system. There is an overall tendency in both departments, particularly in Department X, to take the system as a necessary device for allocating a limited amount of financial resources for research in an effective way. As for the institutional strategy towards the RAE, both departments say that they have largely been influenced by it in

the process of implementation.

At the individual level, some common elements are found between interviewees in Departments X and Y as follows:

a) Methodology: lack of clarity, equity, objectivity and efficiency, disadvantages of conducting interdisciplinary research, correctness of judgement on international quality, unfairness of the panel system (e.g. advantages of having a member of the panel in a department).
b) Impacts on research: the creation of 'short-termism', a tendency to rush into publishing, an increase in premature publications, and the emergence of an element of gamesmanship.
c) Impacts on other activities: less time for teaching, an increase in administrative workload, and a more rapid turnover of staff.
d) Impacts on relationships with colleagues within and beyond the department: an increase in tension, an increase in concern with research at the departmental level rather than at the individual level, isolation of those who are less research active and possible discouragement of inter-university co-operation.
e) Impacts on academic freedom: limited unless the nature of the research is controversial.

Considering the different amount of time required for the completion of each piece of work, it was also indicated by a few interviewees in both departments that each field of research would require different assessments, even within one disciplinary area.

At the same time, some clear differences are also observed as follows:

a) Reactions: Informants in Department X are relatively positive about the general idea of the RAE, though they have not been entirely satisfied with the details of the

system. Interviewees in Department Y tend to be cautious about the adaptability of the RAE to their subject area.

b) Applicability of the current intervals: Although some informants in both departments expressed problems with standardising the number of papers for submission, informants in Department X tend to complain about the lack of consideration of 'productivity', while interviewees in Department Y criticise the neglect of long-term work and the disadvantages to young researchers.

c) General attitudes towards the system: While most informants in Department Y tend to accept the RAE as a fact of life, they have raised a number of questions about the current initiative of the government and the centre of the university. For instance, their concerns are expressed on the inapplicability of science-oriented ideas in non-science, the uncertainty of the government's final objectives, vagueness of the institutional process in resource allocation and the role of the university.

Alternatives were suggested by both Managers and academics, including the abolition of the RAE and the re-designation of the institutions (suggested by M), and a variety of proposals (expressed by individual academics) for the improvement of the present RAE, in terms of its criteria, intervals, the panels' deliberation processes, feedback and methods of judgements.

On the whole, across the organisation, some contradictory perspectives are observed between the centre and the departments examined, particularly with regard to departmental autonomy and the institutional policy towards the RAE. Although both institutional managers tend to stress the successful elements of Warwick, each of the departments as well as their individuals do not entirely agree with institutional policy, complaining about 'excessive' intervention from the centre. In this sense, Warwick has

not precisely achieved its original intention, i.e. a strong departmental base.

Chapter 5 Development of National Policy on the Evaluation of Research in Japan

5-1 Introduction

This chapter discusses the evolution of national policy on research assessment in Japan in connection with background factors and recent political debates. It examines academic discussions as well as the government's perspective in order to clarify current concerns on the issue.

5-2 Background to the Issue

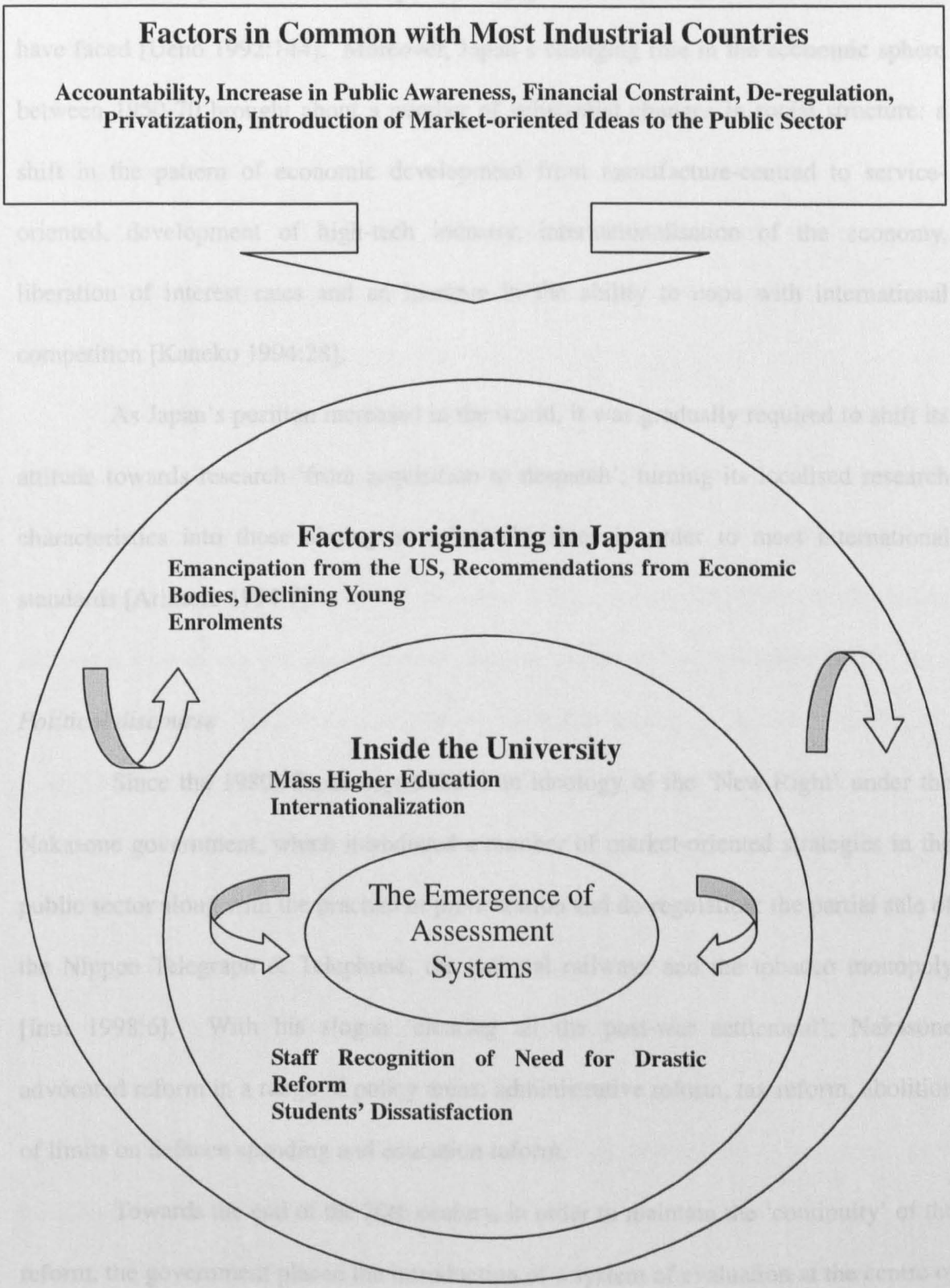
A multitude of elements has contributed to create the dynamics towards the introduction of quality assurance in Japan [Figure 5-1]. Some of these phenomena can be observed in other parts of the world in the same period, while some are particularly associated with the nation and the university itself. This section, therefore, examines these factors from various perspectives.

FACTORS ORIGINATING IN JAPAN

Socio-economic discourse

Post-war Japan is, above all, characterised by its remarkable economic growth rates, averaging 7.6 percent in 1953-59, and 11.2 percent for 1959-1970 [Mikitani 1973:246]. This was attained by several strategies: an economic system based on free competition, successful implementation of modern production techniques imported from

Figure 5-1 Factors affecting the Emergence of Assessment Systems in Japan



overseas, the existence of a labour force with comparatively low wage rates and high productivity, a very high rate of personal savings and ample supply of funds available to export-oriented modern industries [Mikitani 1973:246]. This achievement led Japan to realise that society would have to cope with many issues which most industrial countries have faced [Ueno 1992:144]. Moreover, Japan's changing role in the economic sphere between 1950-70 brought about a number of substantial changes in social structure: a shift in the pattern of economic development from manufacture-centred to service-oriented, development of high-tech industry, internationalisation of the economy, liberation of interest rates and an increase in the ability to cope with international competition [Kaneko 1994:28].

As Japan's position increased in the world, it was gradually required to shift its attitude towards research 'from acquisition to despatch'; turning its localised research characteristics into those aiming at universal values in order to meet international standards [Arimoto 1994:7].

Political discourse

Since the 1980s Japan experienced an ideology of the 'New Right' under the Nakasone government, which introduced a number of market-oriented strategies in the public sector along with the practice of privatization and de-regulation: the partial sale of the Nippon Telegraph & Telephone, the national railways and the tobacco monopoly [Inui 1998:6]. With his slogan 'clearing all the post-war settlement', Nakasone advocated reform in a range of policy areas: administrative reform, tax reform, abolition of limits on defence spending and education reform.

Towards the end of the 20th century, in order to maintain the 'continuity' of the reform, the government placed the introduction of a system of evaluation at the centre of

the whole administrative reform [Arimoto 1994:13]. In both prefectural and governmental administrations the introduction of a new system of assessment so-called 'administrative evaluation' to all public services was proposed as a means of maintaining 'quality', and the detail was discussed within the parliament in 2000/01 [*Asahi Newspaper* 9/10/2000].

Emancipation from American influence

After WW II, the US had, for several years, occupied the whole national administration of Japan, imposing a number of US-oriented notions and practices in all aspects of society, e.g. the issuing of the New Constitution.

The education system was not exempt from this, and through the drastic reformation of the education system initiated by the US Mission, the number of institutions called 'university' was suddenly tripled (68 national, 18 prefectural/municipal, 92 private, 178 in total in 1947). All private institutions including some special training schools were accredited as 'university' in this reformation. As a result, numerous institutions took on the role of higher education [Amano, I 1997:136], though before WW II, the education system had mainly followed European models.

At a glance, this rapid increase was successful, giving a way to widen HE opportunities. However, a number of contradictions remained in terms of curriculum, teaching quality, research functions and the meanings of HE, since the government in those days had acquired what was recommended from the US without serious reflection on the actual merits of the system [Aoki 1992:22].

Since that time, however, Japan has gradually realised how deeply its 'new' educational system was rooted in the needs of American society, and was largely incompatible with Japan's own requirements [Osaki 1995:8-9]. Educational reform

since the 1980s, therefore, was intended to slough off these US-oriented elements, and grope for its own identity [Kitamura 1988:235]. The government's aims included re-emphasis on traditional Japanese morality, reassertion of government authority over teachers and alteration of the 6-3-3-4 structure of the system [Schoppa 1991:48]. Ironically, however, in the attempt to practise a system of assessment, the government could not help but monitor the American system again to learn some of their ideas.

Demands from economic bodies

In the process of policy-making, the most influential power base stems from the nation's leading economic bodies: the Federation of Economic Organisations, the Japan Federation of Employers' Associations and the Economic Co-operative Associations.

From the early 1970s, economic leaders realised that there was an incredible gap between what was taken for granted inside Japan and what was required in the outside world, particularly in terms of the quality of manpower, and that Japan would have to reorganise its social structure so that it could match international requirements. What they stressed was the need to create 'genuine leaders' in society, who could respond to global changes as well as internal trends appropriately, and to maintain the stable supply of a well-qualified labour force to meet changing international and domestic demands. For this purpose, they expected universities to reconsider their roles in order to produce those who could contribute to this [Hosoi 1999:16].

The economic bodies have published numerous proposals, particularly since the 1980s. In their reports, while criticising the government's education policy which had contributed to creating standardised citizens, they noted that it was the lack of competitiveness between institutions that undermined staff morale and teaching quality.

It is out of this climate that they initially proposed the idea of *selectivity*, including a plan for reviving the system of a special fund for former imperial universities to consolidate research excellence, while limiting the subsidy for private institutions by encouraging them to pursue profits [Hosoi 1999:18]. It was proposed to create a competitive environment in which each of the institutions could identify their position by their performance, and to promote fixed-term contracts for academic staff in order to stimulate academic mobility.

In fact, the relative standing of the university had, by this time, decreased in comparison with companies' own research institutes. It is said that the budget of R&D in business was six times higher than that of universities in the 1980s. Under this condition, company-owned research institutes had enhanced not only basic research, but also applied and developmental research in many subjects [Hosoi 1999:13].

Declining enrolment

With the sharp decrease of the 18-year-population since 1992, it became an urgent matter for each of the HEIs to cope with this demographic trend [Amano 1994:3]. Most universities had realised that they need to improve the quality of their provision in order to attract more young entrants [Baba 1996:104; Amano 1994:64]. For private institutions in particular, this was a matter of survival, since not attracting students may lead to closure [Amano, I 1997:137]. Hence, the situation urged the HEIs to diversify their role, by providing more opportunities for lifelong learning, whilst encouraging the 18-year age cohort to acquire higher education [Hosoi 1999:14].

FACTORS IN COMMON WITH MOST INDUSTRIAL COUNTRIES

Accountability

The more people who acquired higher education, the more they paid attention to university activities. Therefore, it was considered that a new relationship would have to be built up between the public and the university, and this could partly be achieved by disclosing all institutional activities through the introduction of an assessment system [Kaneko 1992:34]. In other words, the time had come for society, which had long admitted the existence of 'universities' without any obvious returns, to request them to account for their quality, effectiveness and values by measuring these in some way or other [Kitamura 1990:21].

Financial constraints

Kitamura writes that it is an ironic phenomenon that 'at a time when the higher education system desperately needed bolstered support and when expectations for it were elevated, the government was facing stringent financial difficulties' [1997:145]. Due to escalated public pressures to curtail government spending, universities' funds from the government had hardly been increased throughout the 1980s.

In the 1990s, some academics conducted a campaign to raise additional public expenditure for teaching and research in HE, and the government raised it slightly higher, however not evenly but by introducing more selective funding. At the same time, self-financing efforts were encouraged by introducing collaboration programmes with private companies. However, in the late 1990s, the Hashimoto government introduced severe financial reduction once again, while promoting rationalisation and the benefit principle which encouraged customers to pay their costs themselves, while the government minimised its support [Hosoi 1999:13]. Under these circumstances, it became urgent to show how effectively the taxpayer's money was being used [Kaneko 1992:33].

FACTORS DERIVED FROM INSIDE THE UNIVERSITY

According to Amano [1994:4], external factors were just the outward 'trigger' of the issue. The main demand had been mooted within the HEIs in the process of responding to social changes: increasing numbers of HEIs, increase in the participation rate, changing relationships between national and private institutions, the changing role of the university, an increase in newly established special training schools, the promotion of lifelong learning, and changing relationships with secondary education and with business [Amano 1994:9-18].

Firstly, the need was recognised by academics. According to the nationwide survey on HEIs' reaction to self-evaluation conducted in 1991 by the Research Institute for Higher Education [RIHE 1991:39], the majority of institutions agreed with the urgent need for reform in order to improve their teaching and research environments. Since the old accreditation system did not cover the recent demands for changes, it was acknowledged that it had to be revised to meet current requirements [Aoki 1992:27].

Secondly, students were increasingly dissatisfied with the quality of teaching and research in universities, criticising what was taught in the university as not matching public demand, with most staff spending more time on their research than teaching [Arimoto 1994:8]. Consequently, it was reported that student achievement was low [Arimoto 1994:9]. This was partly associated with the shortage of government subsidies to private universities, while their tuition and fees continued to swell year by year [Kitamura 1997:146].

Lastly, the promotion of academic mobility through the exchange of staff and students with overseas universities prompted HEIs to change their rigid structures, since it allowed institutions to reflect on their quality of teaching, research and administration

from international perspectives [Kitamura 1984:9; Arimoto 1994:6].

5-3 Political Development of the Evaluation of Research

Throughout the post-war period, the Japanese government has put great emphasis on the development of science and technology. This policy has been discussed separately, apart from the main educational policies including those for higher education, and different governmental bodies (the Science and Technology Agency and the Ministry of Education) had been in charge. The policies for the evaluation of research, therefore, were proposed by different ministries, the one science-based and the other covering all educational policies. This section describes the developments of these two streams individually, though with the amalgamation of the Science and Technology Agency and the Ministry of Education that took place in early 2001, these two separate policies might be unified in the near future.

POLICY TOWARDS SCIENCE AND TECHNOLOGY

A specific policy for the nation's science and technology emerged from the establishment of the Council for Science and Technology in 1959, a consultative body to the Prime Minister. This Council was intended to promote science and technology, while responding to demands from business. Members of the Council included the Prime Minister (PM), representatives from several Ministries such as Education, Treasury, the Science and Technology Agency, the Economic Planning Agency and some prominent experts from the HEIs. The Council was charged with the co-ordination and implementation of national policies for science and technology, and the PM always consults the Council if s/he needs to deal with any relevant matters.

The first report by the Council, *The Comprehensive Plan for the Development*

of Science and Technology for the Next 10 Years (1960), focused on the serious lack of engineers in the next decade, proposing that there was an urgent need to produce (at least) 170,000 engineers by enlarging the existing university departments, as well as creating new institutions. The report was prepared to support the technological development of infrastructure, coupled with the Ikeda government's famous scheme which intended to double the incomes of all citizens within the next 10 years. It was also aimed to catch up with Western countries, by persuading the nation to improve its science and technology [Hosoi 1994:22]. As a result, the decade of the 1960s saw a rapid increase in students and young researchers in the field of technology.

In the 1970s, the attention of the Council centred on the treatment of environmental issues, e.g. pollution, food contamination, having shifted its focus from the needs of economic development to the improvement of public life. As for scientific research in universities, the enhancement of basic research was proposed within the limits of public expenditure, while encouraging the HEIs to contribute to the development of the nation's priority subjects: nuclear energy, astronomy and ocean development. After having experienced the energy crisis in the early 1970s, the effective use of limited resources was stressed by establishing closer links between the government, academics and industry [Hosoi 1994:23].

The policy of the 1980s clearly divorced itself from the trend of catching-up to the West, and began to explore the way in which Japan could contribute to the world's science and technology. The shift was accelerated by external pressures, particularly from the US, which had long criticised Japan as a 'free rider' on Western basic science. Besides, as Japan stood out as an economic superpower in Asia, it was urged from outside that the nation should more proactively invest in the development of world science [Nakayama 1997:33].

In the same period, several major 'think tank' organisations, e.g. the National Institute for Research Advancement, conducted comprehensive surveys on the future strategy of science and technology. They proposed that, in order to survive severe international competition, the only way was for the nation to develop its own creative technology as a 'bargaining power' [Nikkyoso-Daigakubu 1987:148]. This view was also supported by the Ministry of International Trade and Industry, which stressed the need to cultivate the very best experts in science and technology, as well as a large number of well-qualified manpower by drawing out more 'creative thinking' from the young.

The eleventh report of the Council was released in 1984, focusing on the promotion of high-technology in R&D, the furtherance of collaboration with industry and the consolidation of research by introducing an evaluation system for research. From this proposal, research assessment first emerged in the history of science and technology. At the same time, attention was also paid to the improvement of basic research [Hosoi 1994:23]. These proposals were taken over in the 18th report of the Council (1992), which included a statement on the urgent requirement for refurbishing decrepit buildings and facilities in the university. Thus, the main policy in this decade lay in two directions, the promotion of leading hi-tech industry and the improvement of basic research.

In the 1990s, the government's policy for science and technology was further intensified by the enactment of the Basic Law on Science and Technology in November 1995, which clearly placed the promotion of science and technology as the nation's first priority. Following the recommendation stated in the Law to create a comprehensive plan for the promotion of science and technology, the PM requested the Council to deliberate on the issue, seeking a wide range of views from relevant Ministries and

institutions. Later, the Council presented a report for the next 10 years called *the Basic Plan for Science and Technology*, which was officially issued in July 1996. The main proposals in the Plan include: creating intellectual capital by encouraging young researchers by improving their research environments, introducing an appropriate research assessment and doubling the government's investment on R&D. Specifically, the Plan stated that the government should invest 17,000,000,000,000 yen (106.25 billion pounds) in the 'centres of excellence' over the next five fiscal years from that time (1996/7-2000/1). In so doing, it was intended to promote academic mobility, while creating a more competitive research environment [Hosoi 1994:25].

As for the treatment of research assessment, *the National Guideline on the Method of Evaluation for Government R&D* was issued in August 1997 as the first guideline on the evaluation of research for the nation's R&D. In its formulae, however, the government showed a cautious attitude towards assessment by stating that 'this guideline must deliberately be considered with the characteristics of each research and the respect of its autonomy' [Council for Science and Technology 1997:12]. This guideline was intended to be applied to any R&D institution including relevant departments in universities. The method adopted was formative, rather than summative, and it was proposed to assess each piece of work at different stages in the development of research from planning to completion. Each piece of research was to be assessed not only by individual themes but also by research environments, with the intention of improving the effective allocation of limited scientific resources, as well as revitalisation of research environments.

Overall, the policy for science and technology in the 1990s has significantly been enforced by legislative changes, and it was clear that the government had begun to pursue a way of maintaining R&D with an enormous amount of investment no matter

what the benefits were in a short term period [Yoshikawa 1997:13].

POLICY TOWARDS ACADEMIC RESEARCH

Before WW II, no formal system of accreditation existed in Japan, and it was within the jurisdiction of the Education Minister to authorise institutions and employ appropriate procedures [Toda 1990:28-29]. To be precise, all imperial universities were supposed to imitate the practice of Tokyo Imperial University, the first institution called 'university' in Japan, and the other institutions followed their models [Toda 1990:29].

After the end of WW II, however, the US Education Mission took the initiative in restructuring the educational provision which was rooted in European-oriented models, by newly imposing a US-oriented education system. What they recommended was:

> 1) The governance of universities should be shifted from the hands of the bureaucrats in the Ministry of Education to professionals in the HEIs.
>
> 2) Establishment of Standards for university chartering and implementation of university evaluations should be carried out by university faculty members.
>
> 3) The chartering and accreditation processes should be clearly separated.
>
> 4) The formation of an accreditation association will be required, which should be modelled upon the American HE system [Baba & Hayata 1997:330].

Following these recommendations, a voluntary self-governing organisation of professionals, called the Japanese University Accreditation Association (JUAA) was created in 1947 in order to achieve these goals [Baba & Hayata 1997:330]. Nine years after the establishment of JUAA, however, the Ministry of Education issued the University Establishment Standards in October 1956, specifying the details of university

structure: campus site, class size, faculty size and the number of books in the library, and this eventually made it difficult for the JUAA to maintain its initial function [Baba & Hayata 1997:332]. Since then, once a university met these stringent government's requirements, it has been approved and certified as a legitimate institution. In the meantime, while the JUAA has mainly worked to approve entry standards for the JUAA membership, it could not extend its role as originally intended by the US Mission [Baba & Hayata 1997:331]. Thus, the issuing of this ministerial order was 'a major blow to the effectiveness of the JUAA', and the University Establishment Standards expropriated a substantial part of the JUAA's fundamental functions [Baba & Hayata 1997:332].

Apart from the University Establishment Standards, the Japanese government hardly interfered in higher education policy during the 1950-70 period, intending not to infringe academic freedom [Kitamura 1997:141]. In the 1960s, with the impact of the 'second baby boom generation' and continued high employment demands for college graduates, the government began to make use of its authority to increase the number of HEIs [Amano, I 1997:125], though within the limits of economic purpose [Kaneko 1994:26]. One clear reason for the absence of government control in this period was considered to be that, since by 1974 upper secondary school enrolments (for the ages 15-18) had reached 90 percent of all the eligible youths, much of the government's effort had to be spent on pre-HE provision [Kitamura 1997:142]. Even within the institutions, university administrators had seldom paid attention to the improvement of the quality of teaching and research, being more concerned with making the financial arrangements necessary for the expansion of physical facilities [Baba & Hayata 1997:331].

Yet, with the rapid expansion of HEIs in the 1960s, some concerns were

expressed about the neglect of 'quality' in university provision by several HE bodies: the JUAA, the National University Council, the Federation of Private Universities and the Society of General Education [Arimoto 1994:7]. For example, the Federation of Private Universities had conducted a survey on the possibilities of university evaluation during the early 1970s and presented its proposals to member universities in 1977 [Endou 1992:45]. The JUAA, on the other hand, created a small working group on university self-evaluation in 1979 and published a draft of its criteria and methods of evaluation two years later [Hayata 1997:89]. This JUAA proposal was adopted in subsequent years, and in July 1987, member universities were officially advised to conduct a review based on those criteria [Nishihara 1990:216]. It was the first time that the JUAA had formally requested its members to implement a system of evaluation, though it was not widely adopted due to its time-consuming nature, i.e. there were too many elements for assessment [Nishihara 1990:217-218].

From the government, the first official announcement on the introduction of quality assurance in higher education was dispatched in April 1986, through the Second Report presented by the Ad-Hoc Education Reform Council, an advisory group created under the Nakasone government in 1984. With the understanding that the university is an organisation which is supported by massive public investments, the Second Report stated:

> It is required that the university, in the light of its mission,
>
> -clearly perceives its role and responsibility in society;
>
> -reflects on its research and teaching and its contribution to society; and
>
> -discloses all its activities to meet various demands expressed within and beyond the nation [The Ad-Hoc Education Reform Council's Second Report 1986:Vol.2-1-4].

A system of evaluation was proposed as a means to achieve this goal. In practice, it was later suggested that the University Establishment Standards be relaxed to a considerable degree so that each institution could introduce appropriate assessment in order to meet its individual needs. This was because, since the University Establishment Standards had strictly controlled all Japanese HEIs, it had long been criticized for hindering the creative development of institutions and for leading to a rather monolithic and inflexible system [Amano, I 1997:125].

Considering the urgent need to restructure the whole HE sector, the Ad-Hoc Council also recommended the creation of a new policy-making group on higher education [Kitamura 1997:143]. Following this, a new body called the University Council was established within the Ministry in 1987 to play a key role in HE policy-making, comprising 45 members including academics and business leaders from various fields [Kurosawa 1992:97].

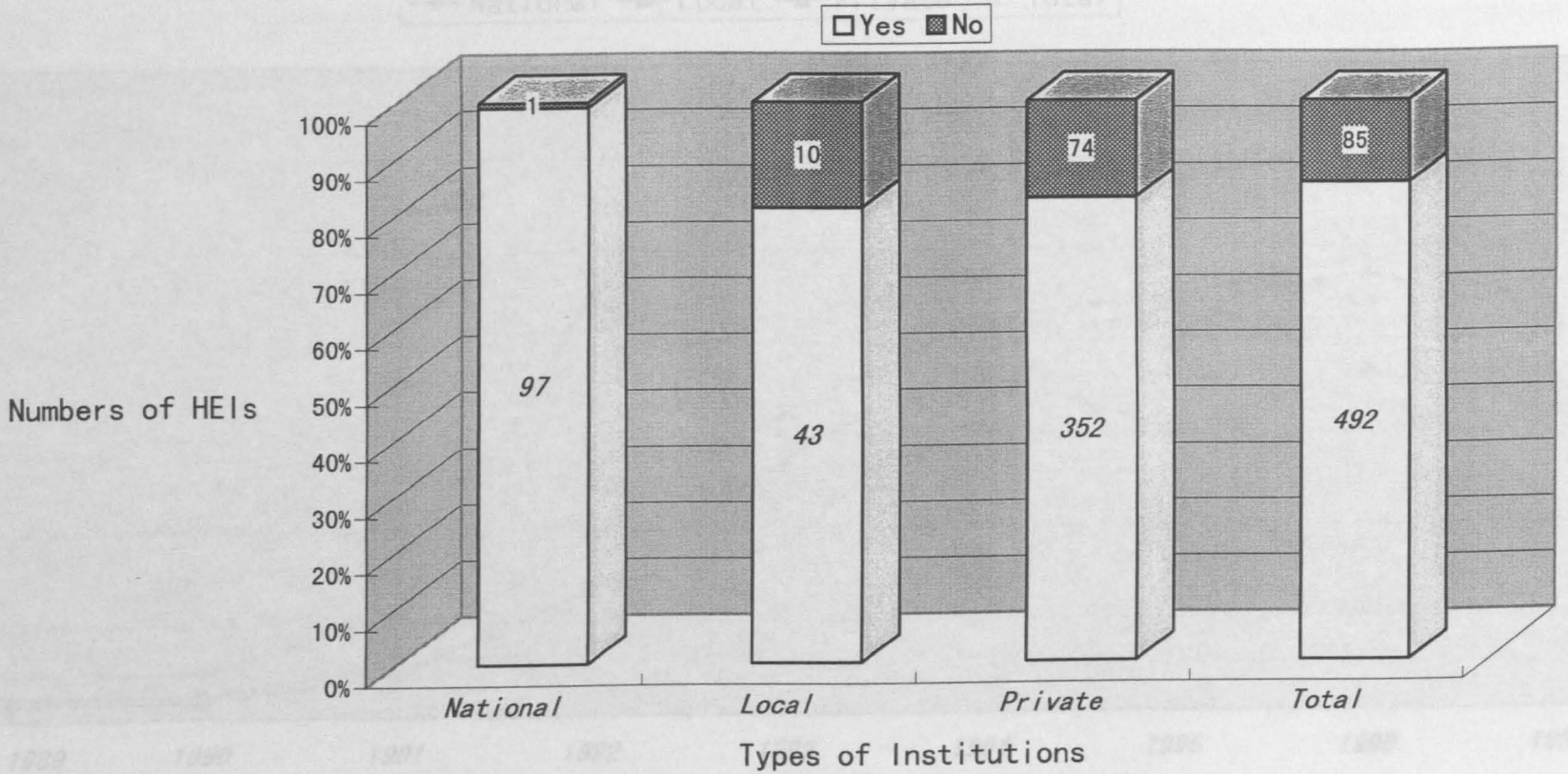
In 1989, the University Council announced that there was an urgent need for the introduction of a system of assessment in the university in order to maintain and improve the quality of its provision [Kitamura 1990:21]. This recommendation was officially submitted by the University Council to the Minister in February 1991, and five months later, the Ministry of Education formally approved the amendment of the University Establishment Standards. With this relaxation of the old regulation, it was intended that each of the institutions could respond to various social demands and enhance their academic environment at their discretion.

In the process of discussing an appropriate system of assessment in the university, the possibilities of introducing 'external evaluation' were proposed within the Council, as these could generate more direct effects. However, some members showed

strong opposition towards the sudden introduction of 'external evaluation', in the light of Japanese cultural characteristics. Hence, the Council later concluded that it would be more feasible to start with the introduction of 'self-monitoring and self-evaluation' in the first instance, which was partly learned from the Dutch Self-Assessment System [Yonezawa 2000:33], so that each of the HEIs could be familiarised with a form of 'assessment' to some degree, and in the second place, other possibilities could be considered [Kimura 1997:11-12]. Following the government's recommendation, each of the HEIs was encouraged to introduce 'self-monitoring and self-evaluation', assessing all their activities by themselves to maintain their standards, according to their mission statements [Yonezawa 1998:21].

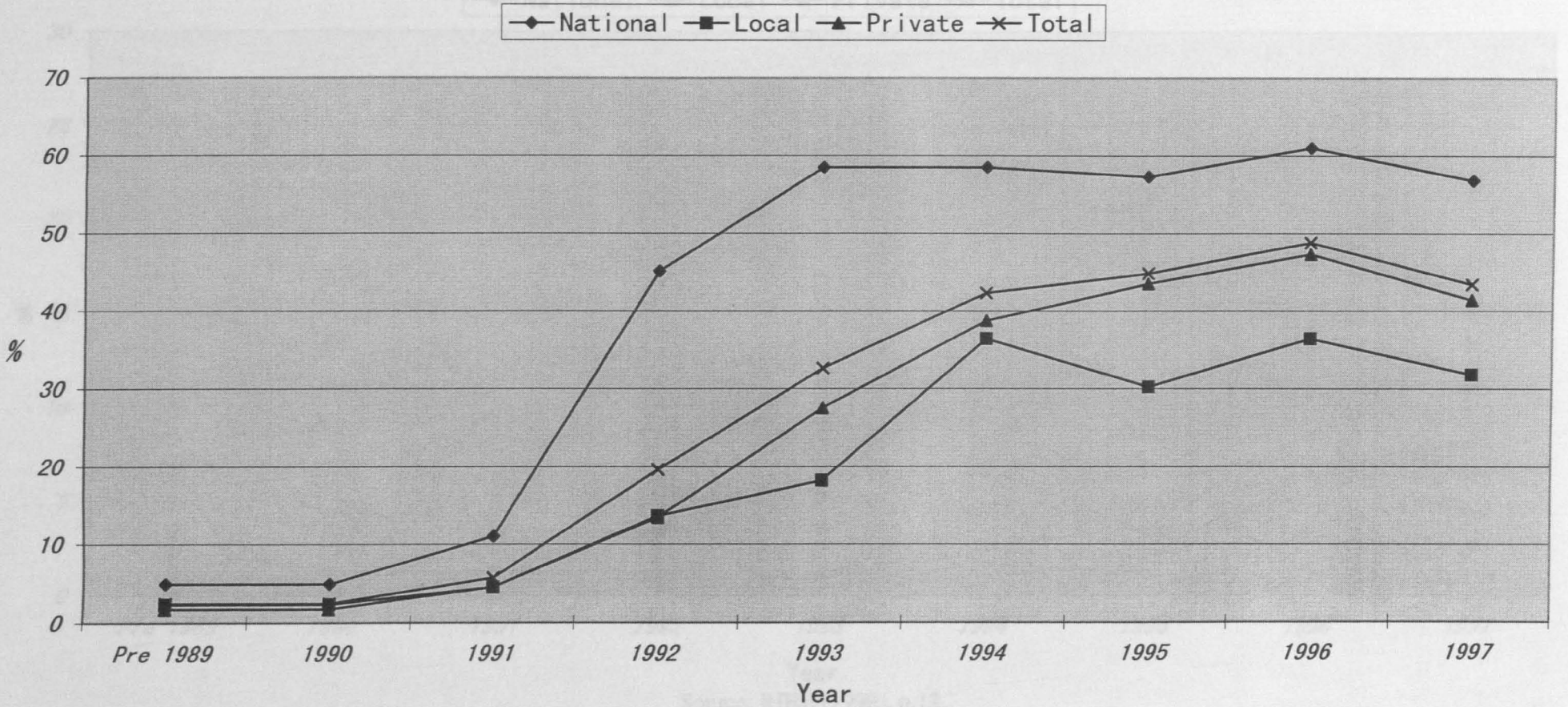
Thus, the Japanese system of 'self-monitoring and self-evaluation' was considered to be a preparatory stage, on the way to achieving a stronger evaluation system which would involve external and third party assessments at a later stage, though it was not to be totally replaced by external assessment. This was confirmed by the fact that a few years after the announcement of self-evaluation, the Council advised on the further need for introducing external assessment, by inviting HE bodies and peers outside the institution to monitor their activities as outer observers so that the system could maintain its validity. The latest statistics collected by the RIHE [1998] showed that 83.7 percent of the national, local, public and private universities had already implemented some programmes for 'self-monitoring and self-evaluation' [Figure 5-2 & 5-3], while 15.1 percent of institutions had also introduced some forms of 'external evaluation' [Figure 5-4]. In September 1999, the announcement on the further revision of the University Establishment Standards strengthened the speculation on university assessment, and it became 'obligatory' for each of the institutions to conduct 'self-monitoring and self-evaluation' at regular intervals, while 'external evaluation' at the

Figure 5-2 Numbers of the HEIs which have introduced 'Self-Monitoring' and 'Self-Evaluation' by 1996



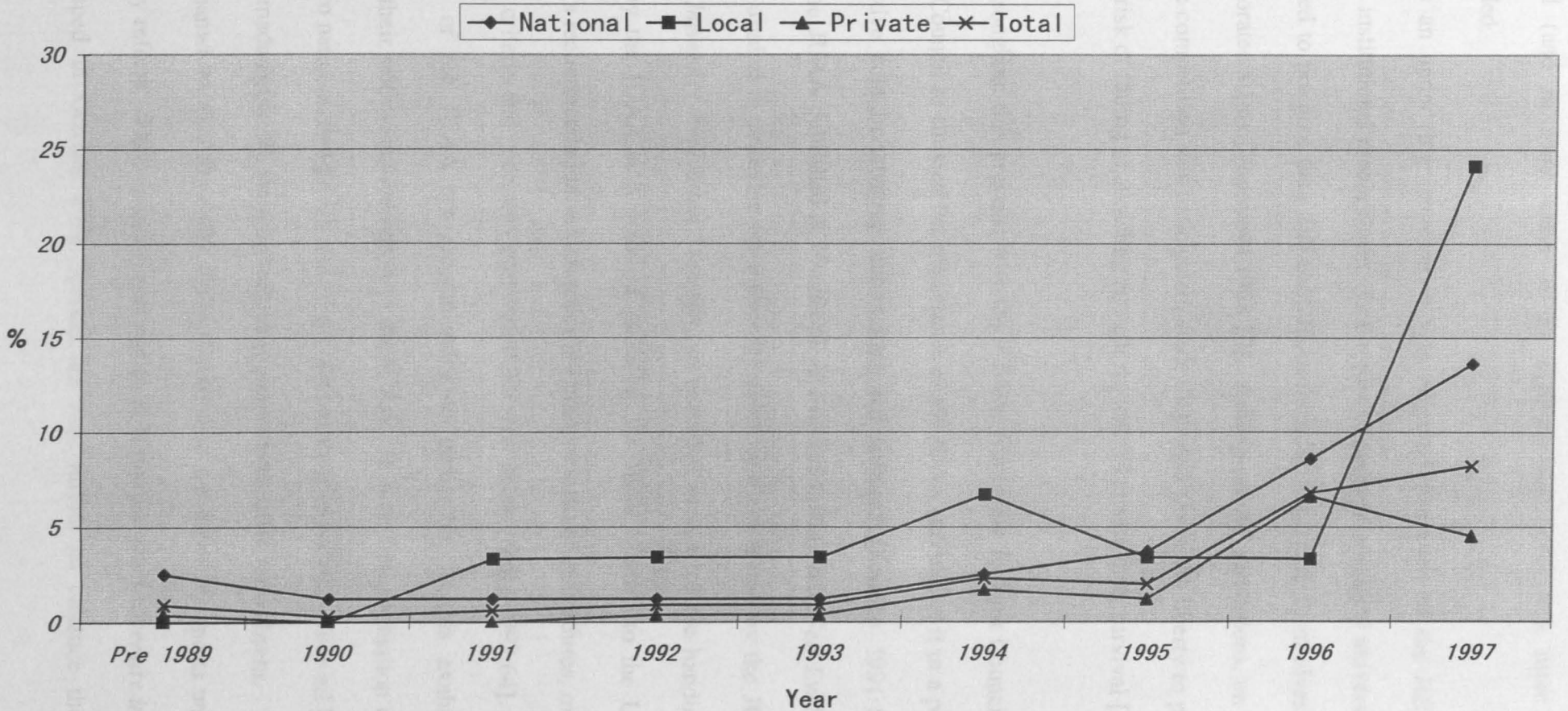
Source: RIHE (1998), p.3, The Ministry of Education (1997), p.38.

Figure 5-3 Percentages of HEIs conducted 'Self-Monitoring' and 'Self-Evaluation' by Year and Types



Source: RIHE (1998), p.2.

Figure 5-4 Percentages of HEIs conducted 'External Evaluation' by Year and Types



Source: RIHE (1998), p.12.

institutional (and in some cases at the departmental) level was more strongly recommended.

As an underlying intention, it was expected that each of the HEIs would improve its institutional management. In the case of national and local universities, this was expected to promote their self-confidence in order to prepare themselves for their new incorporated status [Yonezawa 1998:20]. Among private institutions, on the other hand, fierce competition was anticipated, since they were given the liberty to prosper as well as the risk of failing in attracting enough students to ensure their survival [Amano, I 1997:137].

Throughout this process, both the Ad-Hoc Education Reform Council and the University Council re-stressed the importance of the JUAA and placed it in a position to play an active role in advising universities and colleges [Kaneko 1991:115]. In response, the JUAA published *A Handbook of Self-monitoring and Self-Evaluation* in 1992 to be used as a guideline for university evaluation conducted by the JUAA. In 1995, the *University Evaluation Manuals*, an extended version of the handbook, was presented by the JUAA as a practical guideline for HEIs to react to the University Committee's recommendation, which specified main objectives, procedures, methods of assessment, criteria and necessary preparation for evaluation [Ikeda 1997:64]. Member universities of the JUAA are recommended to participate in this evaluation by submitting their self-evaluation report to the JUAA. In their first evaluation using this fomulae, two national, two public and 18 private universities became involved [Shimizu, Baba & Shimada 2000:58], though most prestigious universities were absent.

Meanwhile, the University Council published a number of reports with regard to university reform. Their recent major report, *A Vision for the University in the 21st Century* issued in October 1998 opened the way further to enhance the present

assessment system, proposing a third party evaluation system for the HEI, while implying the possibilities of linking the allocation of research funding to the quality of research and teaching. Its main idea was to establish a new nationwide assessment body that would gather and publish data necessary for fair competition among institutions. The new body was expected to be independent of both the government and the universities, though the government's affiliated bodies were allowed to be in charge [Yonezawa 1998:22]. It was also stated in the report that the system of assessment in Japan should be pluralistic in the future, and multiple forms of assessment should co-exist in the HE sector.

Apart from this, since the early 1990s, an appropriate method of 'research assessment' had been focused on by the Academic Committee, which was originally established in 1967 under the Ministry of Education to discuss the comprehensive issues of academic research. This Committee had taken over the discussion of the detail of the nationwide third party evaluation and produced a blue-print of the system in its report, *the Comprehensive Promotion of Academic Research: Creating an Intellectual Nation based on Science and Technology*, which was submitted to the Minister of Education in June 1999.

After heated discussion through consulting with a number of HE bodies on a blueprint for the new third party system, it was finally agreed that the new system be attached to the National Institution for Academic Degrees (NIAD), a new government-affiliated organisation established in 1991. It was expected that the NIAD would undertake this role, and the Preparatory Committee for this new organisation submitted a report on the details of its practice in February 2000. The new system is supposed to take a framework which roughly divides all kind of research into 9 areas: Humanities, Education, Law, Economics, Natural Science, Engineering, Agriculture, Medicine and

Comprehensive Science, and each of the areas is to be assessed by approximately 20 experts from various backgrounds [NIAD 2000:Appendix-2].

With this move, the NIAD was formally renamed 'the National Institution for University Evaluation and Academic Degrees' in April 2000. In the original plan for the third party system, it was firmly intended to link it to funding, however, in the specific plan presented by the Preparatory Committee, the proposal stood slightly back from its initial intention:

> If any resource allocating organisation, HE supporting bodies, and sponsors were required to use the outcome of this assessment, they should be allowed to do so as a means of allocation criteria, or as 'one' of the decisive pieces of evidence [NIAD 2000:9].

This is mainly because, since the late 1990s, the government had become concerned that the present situation might lose the real purpose of university reform and the qualitative level of discussion might spiral down if they stuck to the matter of better allocation of HE funding. It was suggested, for example, by the University Committee [1998] that the government should return to the starting point and reconsider what their criteria were by conducting serious deliberations on the role of the university in the 21st century.

5-4 Academic Debates

A variety of issues are being discussed by Japanese academics. These include methodologies, underlying issues, possible impacts and issues related to Japanese culture as follows:

METHODOLOGY

Issues of self-evaluation

The following criticisms can be observed as to the practice of self-evaluation:

- It is weak in internal motivation, and most staff are reluctant to get involved [Terasaki 1998:72-73]. As a result, it tends to fall into mannerisms, and there is a danger that it might not be conducted at regular intervals, since the detail of the programmes is left with each of the HEIs [Kitamura 1988:70].
- It is not evident that those inside the institutions should know themselves best [Kitamura 1988:69].
- It is still uncertain how to ensure its objectivity and transparency [Kitamura 1988:69].
- It cannot avoid becoming perfunctory as it is repeated, and tends to be merely a summary report on the different activities of academic staff [Terasaki 1998:72-73; Shinbori 1992:33-34]. The main job is, in most cases, building up an enormous amount of data on individual members of staff. Therefore, each of the institutions eventually comes to wonder 'what it is for, who will benefit, and why it is necessary' [Hosoi 1994:115].
- The result of self-evaluation has not been reflected by the institutional management including in resource allocation, and its purpose has remained unclear [Fujita 1998:29].
- As a fundamental paradox of self-evaluation, as long as an organisation assesses itself, it has to employ two opposite principles, one autonomous, the other efficient [Kaneko 1992:38]. Since most of the practices conducted by the HEIs are inclined to either side of these principles, the best combination of these two has remained

unsolved [Kaneko 1991:114-115].

- The present methods including the JUAA's *Guideline of University Self-Monitoring and Self-evaluation* tend to lack most fundamental principles of assessment, e.g. clear definition of the role of the university. Therefore, what is covered is confined to the technical side of the issues [Hosoi 1994:123].
- It might merely result in self-advertisement [Shinbori 1992:32; Yamamoto 1991:91].

In the discussion on the effectiveness of self-evaluation, Ichikawa [1995a:362] shows a strong scepticism of the present system of self-evaluation, indicating that it contains a certain amount of fraud:

> I always insist that a summary-style 'self-evaluation' is simply meaningless. In fact, what is presented has not reflected the reality of the institution, while expressing some nominal outcomes which, in some cases, do not exist in practice. I have found that some universities have only presented the work of some well-known figures who are very research active, leaving others out of the report, and nobody has taken any notice of it.

Issues of research assessment

The system of evaluation in Japan has not clearly separated research from teaching, and the government has taken a holistic approach towards both activities. Therefore, not many articles refer to the issue of research assessment in particular. However, some authors discuss its future impact. Arai [1991:85-87], in his summary report on the discussion held on research assessment within the RIHE in 1991, has illustrated some considerations:

Firstly, a system of research assessment should not neglect 'just germinated' research which could thrive at a later stage. This is because nobody could precisely ascertain whether or not the research has unexplored potential. Regarding this, according to Yamada & Tsukahara [1986:16-17], if any system starts to assess the output of research, it would be very difficult to secure these kinds of research. In the introduction of research assessment, which could be linked to funding, therefore, the formulae should be carefully deliberated so that it will not damage any potential for future brilliant work.

Secondly, the measurement could not be identical between different subject areas, and the most appropriate way should be examined in the light of the nature of each discipline, e.g. scope of research, research pattern (including publication style), research standards, geographical dimensions of research, and researchers' general lifestyle i.e. how many hours are spent in the university.

Thirdly, with a system of research assessment, it would always be important to balance judgement so that this can encompass those engaged in large-scale work and/or non-mainstream work.

Importance of pluralism

Many authors address the significance of the co-existence of multiple mechanisms for the correct practice of assessment, considering the divergence of academic research [Terasaki 1998:56; Hayata 1997:98; Hosoi 1994:119; Suzuki 1999:224; Ikoma 1999:26; Nomura 1999:35]. The main reason for this is, if a single system functions to judge from one sense of values only, it would eventually limit the scope of academic potential [Hosoi 1994:118]. For instance, Nomura [1999:35] says that, in order to minimise biased subjective judgements, it is more sensible to refer to the

results of several different assessments. Suzuki has stressed that the outcomes of the different evaluations should be re-interpreted from various perspectives so that institutional as well as individual autonomy will be maintained. If the system neglects this aspect, Suzuki suspects, it will eventually harm all institutional activities [1999:224]. However, the current discussion has not reached the stage of discussing each role of the existing assessments individually [Hosoi 1994:119].

Issues on assessment methodology

Some general issues which could apply to any kind of assessment have also been raised:

- If a system is continuously refined and increased in reliability, it is then going to be difficult for those who have been negatively assessed to regain their self-esteem [Shinbori 1993:45]. According to Shinbori, it is only within the semi-structured and half-measured system that those who are unfavourably assessed can maintain their own dignity and avoid being driven to despair due to the result of assessment. The perfect measurement, if it were created, would suppress all hopes which one might potentially have but which were not apparently shown at the time of an assessment.
- Quantitative elements are more easily adopted than qualitative elements. Therefore, there is a need to develop new formulae to judge 'quality' appropriately [Hayata 1997:98].
- If the outcome is linked to funding, it can easily be used for self-willed purposes, apart from the original intention [Hosoi 1994:123].
- The process of institutional and/or departmental resource allocation should be clearly disclosed and assessed as part of the whole evaluation procedure, if it is linked to

funding [Nomura 1999:54].

IMPACT STUDIES

The most comprehensive study on the impact of the present assessments was produced by the RIHE in 1991, 1993 and 1998 by conducting questionnaire surveys on the practice of most universities in Japan (98 national, 57 public, 431 private). In its latest survey [1998], the usable returns account for 71.3% of the total sample, covering a wide-range of issues, e.g. the validity of the present system of self & external evaluation, elements for assessment which have been adopted in each of the HEIs, and the effectiveness of the third party evaluation. For instance, in response to the question on the effects of university evaluation, the following responses were observed [RIHE 1998:15]:

Positive Effects

- All university activities are improved (72.9%).
- Motivation towards research is encouraged (46.9%).
- Relationship with the community and with industry is strengthened (32.7%).

Negative Effects

- There is confusion in management, since there is no specialist on 'evaluation' within the institution (56.7%).
- It is difficult to make comparison with other HEIs and the system tends to be insular, since the present form of self-monitoring and self-evaluation is, by nature, non-comparative (44.8%).
- The present system does not meet the needs of society and of industry (32.8%).

- The system is not yet widely acknowledged by those within the institution (29.3%).
- The system tends to be perfunctory (28.1%).
- There is no discernable development in its technique and methodology (28.0%).

Other writers have also concerned themselves with the impact of the evaluation system. Some of the main points raised will now be discussed.

More diversified or standardised?

One of the main concerns among academics is that the HEIs would be more standardised in their strategies, while the existing hierarchy between institutions could be more apparent if it was directly linked to funding [Shinbori 1993:31-44; Kitamura 1992:138; Aoki 1992:30; Kaneko 1992:42]. In the interview conducted by the group led by Ichikawa [1995b], Iijima, who used to be a member of the Ad-Hoc Education Reform Council, indicates that aspect:

> In those days (the mid-1980s), what we intended was not designation (of their roles), but diversification of the HEIs by giving them more institutional autonomy. However, looking at the present state of Japanese universities, what I am afraid of is all might ultimately chase the same strategy... If a highly ranked institution A shows one example and it looks successful, then the next highly ranked institution B will follow A, then C follows B... D follows C etc... All want to behave like A in the end... this is a problem of Japanese culture... everybody prefers to be standardised, and even if it's impossible in practice, they want to pretend to be the same. What is truly required is to consider how each of the institutions will be able to enhance its 'own' autonomy, making use of more discretion given by the government [Ichikawa 1995b:141].

With the system of assessment, most authors point out that there is a danger that institutional and individual autonomy could be neglected if the institutions were over-regulated.

Neglect of non-mainstream research

Referring to the recent legislative change, Kobayashi [1997:43-44] suspects that the money might centre on areas which are relevant to economic needs and/or those close to the public life. Hayata [1997:98] also says that it is important to consider how to respect the academic freedom of those in non-mainstream areas, as well as to enhance academic interaction between those in the mainstream and those out of it. Seki [1991:7] writes that while government attention is paid to the enhancement of science and technology, not enough focus is centred on most areas of non-scientific subjects, though the reality of academic life in non-science is largely different from that in science.

Pressures on the research community

Shinbori [1992:34] points out possible impacts on individual mentalities, suspecting that the current move towards evaluation may create new tensions between individuals, since the system eventually makes those who are assessed more conscious about themselves and others, and some may curry the favour of assessors.

Nomura refers to possible impacts on other activities, indicating that the development of university assessment may eventually lead to the neglect of teaching and other activities, while research itself becomes more highly respected than in the past [1999:49].

UNDERLYING ISSUES

Increase in government intervention

It is an epoch-making event in the history of Japanese universities to be given room for discretion by the amendment of the University Establishment Standards. Some authors, however, point out that all the present forms of assessment introduced in universities are driven by government initiative, not purely by institutional demands [Kitamura 1988:72; Kuwata 1995:361]. Therefore, the system can easily become bureaucratic, unless it particularly specifies a rule to minimise the government's control [Shinbori 1992:26; Terasaki 1998:56]. Besides, whether or not each HEI implements an assessment system could be a clear indication to the government whether or not each of them agrees with the government's policy [Hosoi 1994:274].

Moreover, some authors suspect that there has been an underlying political intention to introduce these different forms of assessments, e.g. an increase in 'remote' bureaucratic control by the government [Hosoi 1994:127; Ikoma 1999:26; Nakayama 1998:21]. As an alternative, Hosoi [1994:127-128] suggests the possibility of establishing a new university federation which could consist of representatives of the HEIs and giving it the role of accreditation and institutional assessment, since it is totally an internal matter for the institutions to take into account.

Limitations of the government's proposals

Nogami [1987:26] points out that, in appointing members of the University Council, there is a tendency to assign those who are on the government's side, and in this sense the Council is not completely an independent body. More fundamentally, Hayata [1997:88] says that the de-regulation of the University Establishment Standard should not necessarily be combined with the announcement of self-evaluation. Other

authors point out detailed defects of the government's reports on university reform:

- The reports neglect considerations of mental and physical pressures which academics would have to experience as a result of drastic reform [Kaneko 1991:117].
- All the reports have fundamentally repeated the need for reform, though nothing has essentially been changed.
- The reports tend to avoid any practical suggestions, while concluding with conventional expression i.e. 'it shall be conducted under the discretion of each of the institutions' [Amagi 1995:39].
- The reports have not referred to the need for sufficient funding for substantial reform [Kurosawa 1992:97; Kitamura 1992:9; Kaneko 1991:116; Hayata 1997:98], though it would ultimately be impossible to conduct any system of evaluation without any financial backing.
- The reports never touch upon the existing gap in the government's resource allocation depending on the reputation of the HEIs [Kaneko 1991:115].
- There is no discernible criteria or philosophy underlying the reports and/or regulations, since all recent reports were issued within a short period without serious deliberations on the meanings of HE [Kobayashi 1997:39; Hayata 1997:98; Suzuki 1999:221; Nomura 1999:42].

With regard to the specific policy for science and technology, it is criticised that no substantial data have been presented on what percentage of population should be trained as 'leaders' of society and how this should be done [Suzuki 1999:221]. As for the Basic Law on Science and Technology enacted in 1995, Kobayashi says that since 'it is an extempore rule, derived from the mixture of different demands from those concerned, there is no coherent principle or no actual connection between each of the

proposals in the Law' [Kobayashi 1997:39].

Several authors suggest that more concrete targets should be defined, so that the present arrangement will function more efficiently, while avoiding requiring evaluation merely for 'the system of evaluation'.

Adaptability of market-oriented values in academic research

Some academics question the applicability of market-oriented ideas in the judgement of academic value [Ikoma 1999:20-21; Kaneko 1991:102; Kitamura 1984:9; Kaneko 1992:35]. For example, Ikoma [1999:20-21] strongly criticises recent universities' responsive attitudes towards the public, since the role of the university is not merely responding to social needs, but creating future values, and 'the latter often goes beyond the limit of existing systems of assessment which can be mechanically measured'. Ikoma [1999:21] says that, the public should bear in mind that 'intellectual stimulus takes the human beings beyond the norm'; academic ethos goes beyond what assessment can measure, and this is what universities must justify their existence to the public. Kitamura [1984:9] refers to the gap of understanding of the role of the university between the public and academics, i.e. most outcomes of academic work are difficult to show at regular intervals, while the public always demands substantial data on them. In Kitamura's view, if the university started to pursue its efficiency merely in accordance with public demand, it would eventually generate a threat to the whole academic world [1984:12]. From a practical perspective, Kaneko [1992:35] says that it is a matter of how to balance public needs and academic values.

Role of the university

Several authors focus on the role of the university, since how to place it in the

institutional context is considered to be an ultimate goal of self-evaluation [Kaneko 1994:22; Tanaka 1990:6; Suzuki 1999:220]. In other words, each of the HEIs is expected to reflect on the meaning of its existence and how it should transmit knowledge to the next generation [Kitamura 1992:139]. Externally, they are expected to reconsider how the university should develop its new relationship with the nation and society, including the relationship with the main research institutes owned by leading private companies [Kaneko 1992:34].

Lack of reaction from academics

Relatively passive attitudes of academics are indicated by Kaneko [1992:42]. This is not only because most institutions have already been apprehensive about a crisis, but also because it is difficult to reject the proposals on the basis of institutional autonomy, since the policy has left room for institutional discretion. Several scholars suggest that it is high time for academics themselves to make the most of their discretion, having been released from the previous rigid regulation of the University Establishment Standards [Seki 1991:5; Kaneko 1992:35; Nakayama 1998:22; Yamamoto 1991:91; Nomura 1999:41; Kitamura 1988:68; Terasaki 1998:56]. Nakayama [1998:21-22], for instance, stresses that it is only the HEIs themselves that can recognise the need and limitations of their organisations and explore their essential roles, by respecting the views and ideas of each member of the institution.

ISSUES PARTICULARLY RELATED TO JAPAN

Applicability of 'evaluation' in the Japanese context

A great deal of confusion has concerned the feasibility of applying a Western-oriented idea of assessment in Japanese society, since the notion of 'assessment' and/or

'evaluation' is totally unsuited to the original characteristics of Japanese culture in many respects.

First of all, the concept of 'evaluation' and/or 'assessment' (usually called '*hyôka*' in Japanese) has been vaguely interpreted in Japan. It broadly includes (if literally translated into similar English words): valuation, appraisal, estimation, appreciation, criticism, judgement, grading, measurement, test, examination, marking, rating, comment and review, including all activities which determine a standard of value [Shinbori 1993:38]. The confusion in using this word implies that the concept itself is still unfamiliar to society, and it has not sufficiently been developed as in the West.

The main problem is rooted in one of the traditions in society in which people dislike to judge or to be judged in a direct and/or formal way [Kitamura 1986:84; Ikeda 1997:70]. It is considered that criticising somebody face-to-face or in any direct form will mean disgracing her/his fame and self-esteem, not to mention damaging the social reliance of those who expressed their views in that way. If one has to say something negative to someone, it has to be done in very indirect ways while saving her/his own honour [Shinbori 1993:39]. In reality, however, the Japanese informally do so, while being excessively sensitive to what others do [Shinbori 1993:40], but avoiding any responsibility for that.

Besides, in the nature of their language, the Japanese tend to show humility in a moderate way when they talk of themselves. Even in referring to their academic work, they tend to express their own contribution in amazingly negative and/or modest ways [Nomura 1999:43], e.g. "in my frivolous paper..." (if literally translated). Taking all these into account, it is predicted that any system of 'evaluation' adopted in Japan cannot ultimately fail to be perfunctory, and would be hardly workable as intended [Shinbori 1993:42; Terasaki 1998:56]. Nomura [1999:55-56] illustrates some

implications:

> The Western-oriented idea of 'evaluation' is part of their culture, and to acquire this means that we are urged to change our long-standing culture which has avoided any apparent expression and/or judgement of others depending on their abilities. It will require extraordinary efforts to entirely convert our own system without having rationalistic perceptions towards judgement of others that has originated in the West. Since it is completely based on a logical procedure, it will undoubtedly cause a number of confusions and contradictions in Japanese society, which has more or less attached importance to illogicality and ambiguity for a long period of time.

In connection with this, several authors criticise the government's continuous appraisal of the Western models, drawing out the fact that there are huge differences between most Western countries and Japan in terms of the role and function of the university in society [Kobayashi 1997:39; Hayata 1997:92; Aoki 1992:30; Hosoi 1994:128; Shinbori 1992:28; Nomura 1999:38; Amagi 1995:42]. Nomura [1999:38], as an example of these differences, notes that in Japan, each member of society is supposed to act in accordance with the standards of the group to which s/he belongs, and there had been no strict concept of 'individual' until the period of modernisation, and this distinction has been unclear even until the present to some extent. Nomura wonders how society could acquire the Western-oriented norm of 'evaluation' without having a clear recognition of an 'individual'. In short, when it comes to 'evaluation', 'the more you mix the Western-originated idea with Japanese elements e.g. ambiguity, the less you find any substantial outcomes' [Nomura 1999:41]. The only option, Nomura suggests, is that the nation should establish its own system of judgement without referring to

others.

Incompatibility of the new system in old-fashioned structure

Negative comments are expressed on the 'out of date' structure of present universities [Kobayashi 1997:45; Nomura 1999:47; Shinbori 1993:41].

Firstly, there is a gap between current demands in funding and the present funding structure. Within the institution, money used to be allocated on the basis of the department or *kôza*, a small unit of the same subject group which normally comprises a professor(s), an associate professor(s), research assistants and a small number of research students, no matter how the money was spent. However, in recent years, researchers particularly in science tend to be engaged in large-scale research projects. Since those projects require more funds, the funding structure needs to be reorganised [Kobayashi 1997:45].

Secondly, until quite recently, life-time employment had long been guaranteed in most parts of the public and private sectors, and salaries are basically determined by age, the number of years worked and the title of the job. Japanese academics had undoubtedly enjoyed the benefits of this and most of their jobs are still secured until their retirement at the time of writing, though 'fixed-term contracts' have recently been introduced in some newly established institutions, following the recommendation by the University Council. In short, society itself is not purely based on individual competence. Under this condition, it is very difficult to apply any result of assessment to the promotion of academic mobility as seen in the West [Shinbori 1992:32]. Consequently, any outcome of assessment would not essentially damage most of the academics, while creating new tensions between them [Shinbori 1993:24,41].

Thirdly, as institutions, Japanese universities had tended to be closed and self-

righteousness in terms of their research style, university structure and administration, and these elements have impended them from drastically reforming themselves [Shinbori 1993:40; Nomura 1999:47]. Some authors refer to the lack of understanding of international standards [Seki 1991:5; Umakoshi 1994:291]. Umakoshi [1994:291], for example, points out that the present system of self-evaluation is deficient in reconsidering the role of Japanese universities in an international perspective.

Fourthly, there is an absolute lack of management staff in HEIs [Hayata 1997:98; Nomura 1999:55; Shinbori 1992:32]. Due to this, most substantial parts of the administrative work are currently undertaken by academic staff themselves who are not well-trained as institutional managers. Under this condition, a question always arises "Who should do... and how?". Therefore, it is predicted that each institution would need to establish a large-scale administrative office which particularly deals with the evaluation work supported by a good number of management staff [Shinbori 1992:32; Nomura 1999:55], since most universities have currently encountered difficulties in gaining consensus from staff on who should be engaged in this enormous amount of administrative work [Nakayama 1998:20; Hayata 1997:98; Terasaki 1998:72-73; Yamamoto 1991:91; Hosoi 1994:127; Kurosawa 1992:97]. Nakayama [1998:20], for instance, says that the government has paid little attention to how each of the institutions should cope with this, while merely stating that 'it should be done by institutional discretion'.

Thus, Japanese academics have pointed out a number of uncertain elements of the present systems of evaluation, while encountering cultural obstacles in the process of implementation.

5-5 Views of the Academic Committee

This section examines the view of the government by means of an interview with a member of the Academic Committee within the Ministry of Education. The interviewee [**K**] has been a member of the Committee since February 1996.

K has a consistent view on research assessment, and has expressed his view several times in the regular meetings within the Committee. Since **K** shows a preference for expressing his personal view and even for disclosing his identity, part of his comments do not precisely reflect the government's perspective.

MANAGEMENT STRUCTURE WITHIN THE COMMITTEE

The Committee consists of 27 members, including Presidents of several prestigious universities, Chairs of the Japan Research Council, Heads of private and public research institutes, journalists, some business leaders and prominent professors from a few universities. Most members are drawn from various scientific fields: medicine, engineering, chemistry, biology and physics, though a few members have non-scientific backgrounds. The interviewee **K**, for example, is a famous chemist who has been awarded a number of prominent prizes in the world, and has been very research active over the last 40 years.

Within the Committee, there are four working groups specifically discussing their themes: research assessment, international collaboration, collaboration with industry and community and the promotion of researchers. Each working group comprises a few members and several specialists on that topic, and has a meeting twice a month. Apart from these working groups, there is another group which particularly focuses on the overall development of academic research, including 19 members of the Committee, and this group has intensive meetings about the publication of the main

Committee's report. Hence, each member of the Committee belongs to 1-2 different groups.

PROCESS OF POLICYMAKING

Since its creation in 1967, the Committee's discussion has been centred on specific issues relating to the enhancement of science and technology, e.g. effective use of human-gene programmes. Since the early 1990s, the Committee has begun to develop a strategy for the improvement of all kinds of academic research for the 21st century, by conducting a number of comprehensive surveys, and the outcomes are revealed in their reports [Table 5-5]. When a report is fully drafted, it is passed to the Ministry of Education, and the Education Minister approves it as a government report after consultation. In terms of research assessment, for instance, a survey was conducted by the Committee during the early 1990s, focusing on various aspects of research: the methods of research assessment adopted in other Western countries, average rates of citations in each of the subject areas, the contribution of Japanese researchers to the world's knowledge creation, the number of Nobel Prizes given to Japanese scientists and the nature of their subject areas, and all this data was analysed in comparison with equivalent data presented by other leading countries [Nakai 1995]. The Committee's report *The Evaluation for Academic Research* published in 1997 clearly reflected the outcome of this comprehensive survey. The Committee also took over the discussion on the nationwide third party evaluation system which was proposed in October 1998 by the University Council, combining that proposal with the Committee's existing discussion on research assessment started in the early 1990s. The Committee's report revealed in June 1999 specified the detail of the third party evaluation system.

In the discussion on research assessment, the Committee has paid careful

Table 5-5 Main Legislative Changes with regard to Research Assessment in Japan

1986
The Second Report was presented by the Ad-Hoc Educational Reform Council.
-first indication of the introduction of an assessment system

1989
The University Council indicated the need for university evaluation.

7.1991
Amendments of the University Establishment Standards were announced by the Education Minister.
-recommendation on 'self-monitoring and self-evaluation' in the HEIs

1992.
The Academic Committee presented a report 'The Policy for Comprehensive Promotion of Academic Research for the 21st Century'.

11.1995
Basic Law on Science and Technology was regulated.

7.1996.
'The Basic Plan for Science and Technology' was presented.

7.8.1997.
The Council for Science and Technology's proposal 'The National Guideline on the Method of Evaluation for Government Research and Development' was issued by the Prime Minister.

11.9.1997.
The Science and Technology Agency presented a report 'The Promotion of Evaluation for Research Development'.

9.12.1997.
The Academic Committee presented a report 'The Evaluation for Academic Research'.

26.10.1998
The University Committee presented a report 'A Vision for the University in the 21st Century'.
-first proposal for a third party evaluation

29.6.1999.
The Academic Committee presented a report 'The Comprehensive Promotion of Academic Research in Japan: creating an intellectual nation based on science and technology' and it was submitted to the Minister of Education.

4.2000+
The nationwide third party evaluation system will be operated by the NIAD.

attention to how to judge 'quality' and how to include different perspectives in a single system. Apart from this, the Committee has also been concerned with Japanese cultural characteristics in research: preference for less self-expression, the lifetime employment system (academic tenure), scepticism on a system merely based on individual competency and great sympathy on humanistic aspects, and the existence of a tendency to undertake likeminded work. As another focal point, the Committee has discussed how to include more public opinion (by normal citizens other than specialists) in determining each element for research assessment.

VIEWS ON THE PRESENT SYSTEM

K would agree with the introduction of research assessment only if it had clear objectives, e.g. selective research funding, and would be used for that purpose only. According to **K**, if an assessment is not associated with any clear-cut decision-making, it should not be introduced. Looking at the practice of all the current assessments introduced so far, **K** feels that these are not matched with the existing paradigm of HEIs in many respects, i.e. most of the elements for assessment under the present system do not address the question "What are they for?".

NATURE OF ACADEMIC RESEARCH VS. EVALUATION

In **K**'s view, the introduction of any system of evaluation in the university is a sort of 'Fascism' to academic research, and it only works to damage all mental activities to create unexplored values. In order to explain this, **K** gives his personal view on academic research:

> Academic research is a series of inconsecutive events. I believe that it should be rich

> in 'uniqueness', it has to have your originality, it must fully accompany your own creative thinking, and therefore it should be intrinsically different from others. It is from these elements that distinctive outcomes will be produced.

In this sense, **K** says that nobody in the world can make an ultimate objective judgement on others. As long as an assessment is conducted by others including colleague, peer or any external body, it cannot go beyond its subjective nature. It is possible to measure 'productivity' to an extent, according to **K**, but it will never be workable to measure the 'quality' of academic research, since each piece of work is different by nature and has its own value which is not comparable with others even within the same subject.

NEGATIVE EFFECTS OF ASSESSMENT ON HUMAN BEINGS

With a system of assessment, **K** explains, the first thing human beings will definitely lose is 'creativity', since the system tries to regulate all human activities which are essentially uncontrollable by any mechanical method. Any form of assessment can hardly match any type of academic research, while it unnecessarily works to appraise one's ability at irrelevant times. More intrinsically, **K** insists that all the convenient commercial products including mechanical measurements created by mankind have prevented people from enhancing their potential. In other words, **K** says that "(anything derived from any) civilisation has made human beings livestock", referring to the following example:

> Taking *Ichirô*, a famous baseball player in the Japanese Professional Baseball League* for example, he used to be called 'a player of 70 per cent hits', he was truly a genius player who made 'hits' at a very high rate. However, once the League had applied a

> system of evaluation to every player in order to judge the percentage of their hits, *Ichirô*'s normal rate became close to the average of all other players, it's now said that his average rate is more or less 40 per cent, much lower than his previous rate. This was all because of the introduction of assessment, which really had damaged his proficiency, and prevented him from improving his original score. In other words, once the system had applied, he started to care about the rates of other players, and was no more able to play freely without considering 'the number of hits' performed by himself and other players.

*Ichirô was traded to the Seattle Mariners, one of the teams in the American Major League of Professional Baseball in November 2000.

As shown in this example, **K** is sceptical about judging any element of human activity, since it eventually impedes human beings from enhancing their potential.

NATURE OF HUMAN BEINGS AND THE POSSIBILITIES OF ASSESSMENT

K feels that the potential which one person may have is unlimited, if it is not measured by any relative measurement. In this respect, **K** assumes that the system of evaluation, by nature, would not match any creative activity including academic research. Referring to human nature, he comments:

> We have to reconsider what human nature is and what the word 'humanness' or 'humanity' actually means. Human beings are essentially very different not only in appearance but also in ability. They cannot be standardised, they are enormously rich in diversity and their abilities would never be mechanically measured by any relative form of assessment. Any system of assessment completely runs counter to the original

> nature of mankind. It challenges human beings now. It undoubtedly conflicts with the respect of human diversity, and will spoil our potential.

In **K**'s view, it could only be meaningful if one is assessed by an absolute judgement based on its own value, not being compared with others, and that would be the only way to save the infinite potential of mankind.

THE ROLE OF THE UNIVERSITY

Under present conditions, what **K** is afraid of is that each of the institutions might neglect pursuing its own originality, losing its function of self-help. **K** suggests that it is time for the university to clarify its meaning. In the process of policy making within the Academic Committee, therefore, all members have taken this into consideration:

> In our policy making, we always bear in mind what role the university should play in society. Needless to say, what we call 'university' is not a place for business. It must be different from the market in terms of creating 'knowledge', because academic principles are intrinsically incompatible with those of any venture business. In business, the ultimate objective is to produce direct benefits, but in university, we need to have a long-term view in order to consider what will be beneficial to the next generation regardless of whether or not it has direct benefits.

K insists that it is academics themselves who must reconsider why they have to compete with others by assessment and for what purpose they have to work in the 'university'.

THE THIRD PARTY EVALUATION SYSTEM

The nationwide third party system has been in operation since April 2000. As an underlying intention of the new arrangement, **K** particularly refers to the government's massive investment in science and technology and its effective use of selective funding.

However, what **K** worries about is that the state, although it originally has an authoritative power, tends to use it as a means of controlling the whole public sector in recent years. In addition, there is a tendency that the government only attaches importance to technological aspects of academic research as national benefits and the major policy tends to be created in accordance with scientific needs rather than with those of non-science.

INTERACTION

In the process of discussion on the new third party system, the Committee has also investigated some Western ideas of the evaluation for research adopted in North America and Europe. In drafting a blueprint for the new arrangement, therefore, a number of similarities can be found when compared with other Western models, and it is true that the Committee has learned some ideas from the present RAE system in the UK, particularly in terms of the panel system based on a subject-oriented approach and the whole cycle of the system, though some are drawn out from other sources. With regard to this, **K** comments:

> Why have we looked at the UK system? Well, I guess that the simple reason is it looks 'smart'. There has been an image that the British education system is well-mannered. We have looked at the equivalent systems adopted in many Western countries, (but not the systems of other parts of the world)... and among the cases we looked at, we

> thought that the UK system could be quite adaptable to the Japanese context, e.g. in terms of the size of the country. If we looked at the American system, we might feel it's too diverse. That is why we mainly learned ideas from Britain. However, as a chemist, I personally don't appreciate the RAE at all, judging from its guideline, it looks like 'the numbers game' by politicians. I wonder if British academics are really happy with that.

Overall, **K** has a very strong belief in academic research, and never compromises himself with any realistic views shown by other members of the Committee. Therefore, most of his views do not precisely reflect the Committee's view. This is **K**'s basic stance even within the discussions of the Committee, though some members try to persuade him to agree with the main agenda which they intend to introduce. According to **K**, although most other members of the Committee have shown much respect and sympathy with his views, they cannot entirely accept **K**'s ideas as a Committee, since the introduction of assessment is inevitable in society.

5-6 Summary and Observation

The emergence of the debate on the issue of evaluation in Japan can be traced back to three different origins. Firstly, there are some forces which originate in Japan, i.e. external pressures from outside to invest in the world's creation of knowledge to meet its economic power, emancipation from American influences, soaring demands from the leading economic bodies to cultivate the very best elite as well as to maintain a continuous supply of well-qualified labour and a sharp decrease of young enrolments in the 1990s. Secondly, some features can be found in the world in common in the same period: external pressures for accountability and severe financial constraints. Thirdly,

demand is derived from the university itself, and the need for improving the quality of all institutional activities has been recognised by both staff and students, as the system has shifted to mass higher education.

The national policy for the evaluation for research has been mainly discussed through two routes: one science-based and the other covering the whole HE policy. On the science side, the first national guideline on the method of research assessment was presented by the Council for Science and Technology in 1997, following the recommendation presented in *the Basic Plan for Science and Technology*, which was issued one year after the enactment of the Basic Law on Science and Technology (1995).

With regard to the whole HE policy, the first proposal for a system of evaluation appeared in the US recommendation on the creation of an accreditation association, and it was supposed to be practised through the establishment of the JUAA which took place in 1947. However, due to several US-oriented elements which were largely incompatible in Japanese society, it did not properly work as it was intended. Meanwhile, the University Establishment Standards was issued in 1956 and this expropriated substantial parts of the JUAA. Since then, the main work of the JUAA has been confined to accrediting the membership of the JUAA, though its role was re-focussed by the government in the 1990s.

The University Establishment Standards, while specifying details of the physical resources of the university, has not infringed academic freedom, having left authority in each of the HEIs. However, from the 1970s, some HE bodies began to explore the possibility of enhancing the university environments through regular reviews, questioning the quality of its provision. They eventually published some reports, recommending the implementation of an evaluation system in universities. Meanwhile, the government's initiative on this matter first appeared in the mid-1980s

through the publication of the Second Report of the Ad-Hoc Education Reform Council (1986). In the following year, the University Council was created under the Cabinet to discuss and advise on all the issues for HE reform. In response to the University Council's advice, the government announced the de-regulation of the University Establishment Standards in 1991 and encouraged each of the HEIs to introduce 'self-monitoring and self-evaluation' at their own discretion. A few years later, external evaluation was also recommended, and that was supposed to be conducted by those who are in various fields outside the institution. Towards the end of the 1990s, a blue print for the third party evaluation was also proposed by the University Council and later elaborated by the Academic Committee. In practice, it has been in operation since April 2000 through the reorganisation of the NIAD.

A wide range of issues are discussed among Japanese academics on the present forms of evaluation, such as on methodology, impacts, underlying issues and their implications. Most issues underpin very fundamental issues on assessment, e.g. its negative impact on various components of HE, increase in government control vs. institutional autonomy, the applicability of market-oriented ideas to academic value, as seen in other countries. This is also reaffirmed in the comments expressed by a member of the Academic Committee in the individual interview, who stresses the inapplicability of assessment to any human activities in the light of the nature of human beings. At the same time, what is explicit in Japanese debates is the emphasis on the co-existence of various forms of assessments in the HE sector so that different views will be equally considered in overall judgement, while reducing any biased perspective. It is also noticeable that the Japanese government as well as academics show a very cautious attitude to the actual implementation of the system of assessment, reflecting their national characteristics.

Overall, the nation still stands in the preparatory stage of the implementation of different kinds of assessments, and the real effects will not appear immediately.

Chapter 6 Case Study of Nagoya University

6-1 Introduction

This chapter illustrates the practice of Nagoya University as an example of an institutional reaction to recent government policies on university assessment in Japan. As in the previous chapter, this is examined at three different levels - institutional, departmental and individual - covering both science and non-science disciplines.

6-2 Brief Outline of Nagoya University

This and the next sections are mainly based on documentary analysis, as well as on individual interviews with the current Chair of the (institutional) Self-Evaluation Committee within Nagoya University [J].

HISTORICAL CONTEXT

The origin of Nagoya University is closely related to the establishment of a medical school in its local area in central Japan, which dates back to 1871, when a temporary medical school (*Kari-igakukou*) was founded on the site of the town office to develop the study of medicine, together with the creation of a hospital (*Kari-byouin*) in the local council house. This was triggered by the fresh interest in Western medicine, which was prevalent in Japan in those days. Yet, since all these events took place at an historical turning point for Japan, i.e. the transition from a feudalistic to a modernised

society (1868-1880+), the operation of newly established institutions could not last long. The hospital was closed by February 1872, due to the abolishment of the local feudal government by the Imperial Decree, and six months later, the medical school itself ceased its operation, following the total renovation of the national education system. The closure of the hospital was deeply regretted by local people, and some earnest volunteers continued to work on a private basis and built an alms clinic (*Gibyouin*) in April 1872. However, due to the lack of sufficient facilities, the clinic had to be ended in February 1873 [Nagoya University 1998:ix].

Meanwhile, Moritome Izeki, the Governor of the day, who strongly wished to maintain the medical institute in this community, issued a new regulation and collected 10,000 yen from 300,000 of those who supported his idea for refurbishment of the school and the hospital. As a consequence, the hospital was re-opened in May 1873 in the Nishi-Honganji Buddhist Temple in Nagoya, which was followed by the re-establishment of a new medical training school a few months later. The new training school grew into Aichi Medical School in 1881, and was subsequently renamed Aichi Prefectural Medical School in 1901, Aichi Prefectural Medical College in 1903, Aichi Medical College in 1920 and Nagoya Medical College in 1931 with the authorisation of the institution by the central government as a national institution. In 1939, given the donation of nine million yen and an appropriate site for the campus (532,000m^2) in *Higashiyama* by the local government, it was formally confirmed as the seventh imperial university in Japan, called 'Nagoya Imperial University', comprising three Schools: Medicine, Science and Engineering.

After WW II, with the recommendation of the US Mission which intended to abolish the existing hierarchy and increase the number of HEIs, Nagoya Imperial University was renamed 'Nagoya University' in 1947. In the following year, some new

Schools were founded, including Law, Economics and Letters. In 1949, Nagoya University was officially designated as a national university under the jurisdiction of the Ministry of Education and administered in accordance with the School Education Law (1947) and the National School Establishment Law (1949). In response to these legislations, the old structure of Nagoya University was re-organised, newly involving Schools of Education, Agricultural Science, the Research Institutes of Environmental Medicine and Atmospherics, the University Hospital and its branch hospital.

The university began to expand its operation in the 1950s by the formation of several Graduate Schools which were to be attached to the existing Schools. In addition, following the government's policy for the enhancement of science and technology in the 1960s, some scientific research institutes were founded, e.g. the Plasma Engineering Laboratory affiliated to the School of Engineering, and the Institute of Plasma Physics founded as a nationwide communal research centre. This scientific expansion continued towards the end of the 1990s, including the establishment of a number of new research institutes and centres [Table 6-1].

Thus, the development of Nagoya University has been largely science-oriented, which is partly due to the national HE policy that most Japanese basic science should be conducted by national universities, particularly by the former imperial universities and some leading national universities. It is said that Nagoya's financial advantages as a former imperial university enabled the institution to sufficiently cater for these scientific provisions, and the government's focus of investment in the 'centre of excellence' prompted the expansion of these institutes.

Meanwhile, in response to the government's policy on drastic HE reform, some renovations were also conducted in non-science, e.g. the creation of four independent graduate schools in new fields. Furthermore, since the late 1990s, the university has

Table 6-1 Development of Nagoya University

1946 The Research Institute of Environmental Medicine was founded.
1947 Nagoya Imperial University was renamed as Nagoya University.
1948 The School of Law and Economics and the School of Letters were founded.
1949 Nagoya University became a national university under the jurisdiction of the Ministry of Education.
1953 The New System Graduate Schools of Letters, Education, Law, Economics, Science, and Engineering were instituted.
1955 The Graduate Schools of Medicine and Agricultural Sciences were instituted.
1960 The Research Establishment of Plasma Engineering Laboratory was affiliated with the School of Engineering.
1961 The Institute of Plasma Physics was founded as a nation-wide communal research centre, and the Research Establishment of Plasma Physics was partly incorporated.
1973 The Water Research Laboratory of the School of Science grew into the Water Research Institute.
1995 The Research Centre of Health, Physical Fitness and Sports was founded containing the Health Administration Centre.
1976 The Radioisotope Centre was founded.
1979 The Chemical Instrument Centre was founded.
The new Language Centre (now called Faculty of Language and Culture) was formed incorporating the former Language Centre.
1982 The Research Centre for Resource and Energy Conservation was founded.
1984 The Centre for Gene Research was founded.
1988 The Centre for Cooperative Research in Advanced Science and Technology was founded.
1989 The Institute of Plasma Physics was reorganized as an inter-university organization.
The Institute for Fusion Plasma Science Centre was affiliated with the University.
1990 The Solar Terrestrial Environment Laboratory was founded.
The Research Institute of Atmospherics was closed.
The Dating and Materials Research Centre was founded.
1991 The Centre for Linguistic and Cultural Research grew into the Faculty of Language and Culture.
1992 The Graduate School of Human Informatics was founded.
The Research Centre for Resource and Energy Conservation grew into the Research Centre for Advanced Energy, and Conversion.
Nagoya University Symposion was opened.
1993 The School of Informatics and Sciences was founded.
The Water Research Institute grew into the Institute for Hydrospheric-Atmospheric Sciences.
The Bioscience Centre and Education Centre for International Students were founded.
The Information Plaza was opened.
1995 The Graduate School of Polymathematics was founded.
The Centre for Integrated Research in Science and Engineering was founded.
The Venture Business Laboratory was established.
1996 The Branch Hospital was closed, and the *Daiko* Medical Centre was established.
1997 The Research Centre for Advanced Waste and Emission Management was established.
1998 The Graduate School of Languages and Cultures was founded.
The Research Centre for Materials Science was founded.
The Centre for the Studies of Higher Education was founded.
The Education Centre for Information Processing grew into the Centre for Information Media Studies.

Source: The Editorial Committee for Nagoya University Bulletin (1998), pp. ix-x.

begun to co-operate with business more closely, which has been prompted by the creation of the Venture Business Laboratory in 1995. Recently, it has been encouraged to enhance academic collaboration between different subject areas in order to develop a more comprehensive insight into various issues in society, which will enable it to cope with problems in the future.

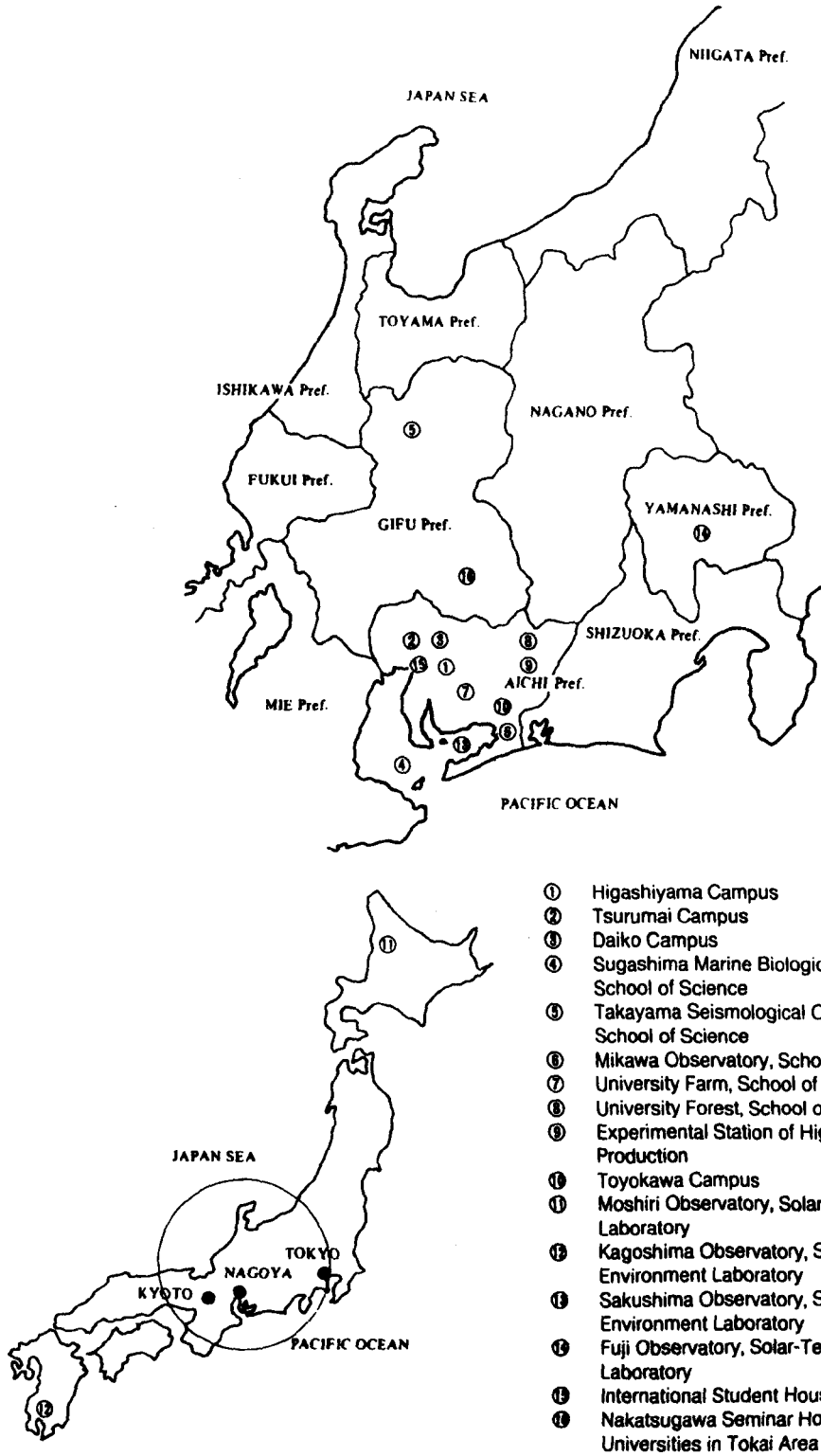
PRESENT STYLE

As the nation's fourth largest city, Nagoya is conveniently located on a southern plain of central Japan in the Aichi prefectural seat with a population of approximately 2,160,000 [Figure 6-2]. The area of this central part of Japan including this city is called *Chukyou* ('central capital'), and Nagoya undoubtedly plays a main part in the industrial economy, administration, culture and transportation in the *Chukyou* Area.

The main campus of Nagoya University called *Higashiyama* Campus is situated in a quiet hilly district of Nagoya City, easily accessible by buses and the underground, comprising the Administration Office, the University Main Library, the Toyota Auditorium and many other buildings including a dozen academic departments. The School of Medicine and the affiliated University Hospital are based on the *Tsurumai* Campus, near the heart of the city, approximately 4 km west of the *Higashiyama* Campus, while the College of Medical Technology and the Medical Centre are situated on the *Daikou* Campus, 4 km north of the Main Campus.

As one of Japan's predominant universities, Nagoya University has consistently taken a leading role in the nation's education and research. It is renowned for its academic achievements in a variety of fields of science, derived from the tireless efforts of people, both on and off campus, who proved unremitting in their endeavour to develop and enhance the quality of this institution [Nagoya University 1998:ix]. In

Figure 6-2 Location of Nagoya University



Source: The Editorial Committee for Nagoya University Bulletin (1998), p. 300.

2000/2001, the university embodied 10 schools, 12 graduate schools, 15 research centres, three national research institutes, libraries and the administration bureau [Table 6-3], involving 15400 students (approx. 10000 undergraduates and 5400 postgraduates, including 1050 overseas students) and 3464 staff (1843 academic 1621 general).

In character with all national universities in Japan, although Nagoya earns some money from its own activities, i.e. incomes from the affiliated hospital, students' tuition fee and others [Figure 6-4], all of those revenues go back into the national income, not directly benefiting the university. From the government, a block grant is provided per number of staff and students, which accounts for 53.2% of the total funds [Figure 6-5]. In addition, Nagoya has gained some research funds directly from external sources: grant-in-aid for scientific research, donations for scientific research, contract research and joint research with industry [Figure 6-6].

The Administrative Bureau is the hub of the university's management, overseeing the operation of general affairs, finance, student affairs and facilities. Among various committees created for institutional management, the Consultative Committee is placed as the supreme policy-making group to deliberate on important administrative and legislative affairs of the university, comprising the President, Vice-Presidents, Deans of the academic departments (including Schools and Graduate Schools), some professors elected from each of the departments, Directors of research institutes and representatives from the main library, the University Hospital and the Research Centre of Health, Physical Fitness and Sports.

Nagoya has conducted various reforms in response to recent government proposals as well as the changing academic scene, i.e. the increase in sophisticated research, the emergence of new interdisciplinary subjects, globalisation and the 'information highway' [Nagoya University 1999:2]. The main effort is devoted to the

Table 6-3 Organisational Structure of Nagoya University

Administrative Bureau
University Library-Medical Library

Schools	Letters
	Education
	Law
	Economics
	Informatics and Sciences
	Science
	Medicine
	Engineering
	Agricultural Sciences
	Language and Culture
Graduate Schools	Letters
	Education
	Law
	Economics
	Human Informatics
	Science
	Medicine
	Engineering
	Bioagricultural Sciences
	Language and Culture
	Mathematics
	International Development
Research Centres	Research Centre of Health, Physical Fitness and Sports
	Computation Centre
	Radioisotope Research Centre
	Chemical Instrument Centre
	Research Centre for Advanced Energy Conversion
	Centre for Gene Research
	Centre for Cooperative Research in Advanced Science and Technology
	Dating and Materials Research Centre
	Bioscience Centre
	Centre for Integrated Research in Science and Engineering
	Research Centre for Advanced Waste and Emission Management
	Centre for Information Media Studies
	Research Centre for Materials Science
	Centre for the Studies of Higher Education
	International Cooperation Centre for Agricultural Education
National Research Institutes	Research Institute of Environmental Medicine
	Solar-Terrestrial Environmental Laboratory
	Institute for Hydrospheric-Atmospheric Sciences

Source: The Editorial Committee for Nagoya University Bulletin (1999), p. 5.

Figrure 6-4 Details of Internal Revenue of Nagoya University (Total 29,133 million yen)

Source: The Editorial Committee for Nagoya University Bulletin (2000), p.46.

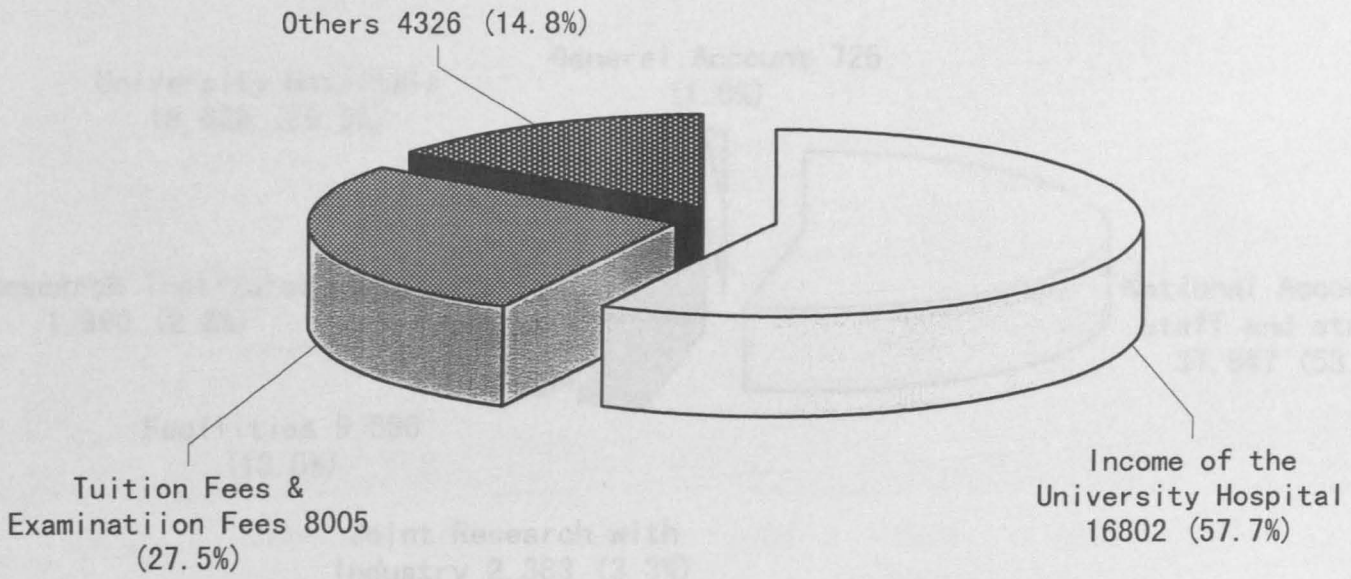


Figure 6-5 Details of Expenditures of Nagoya University (Total 71,150 million yen)

Source: The Editorial Committee for Nagoya University Bulletin (2000), p. 46.

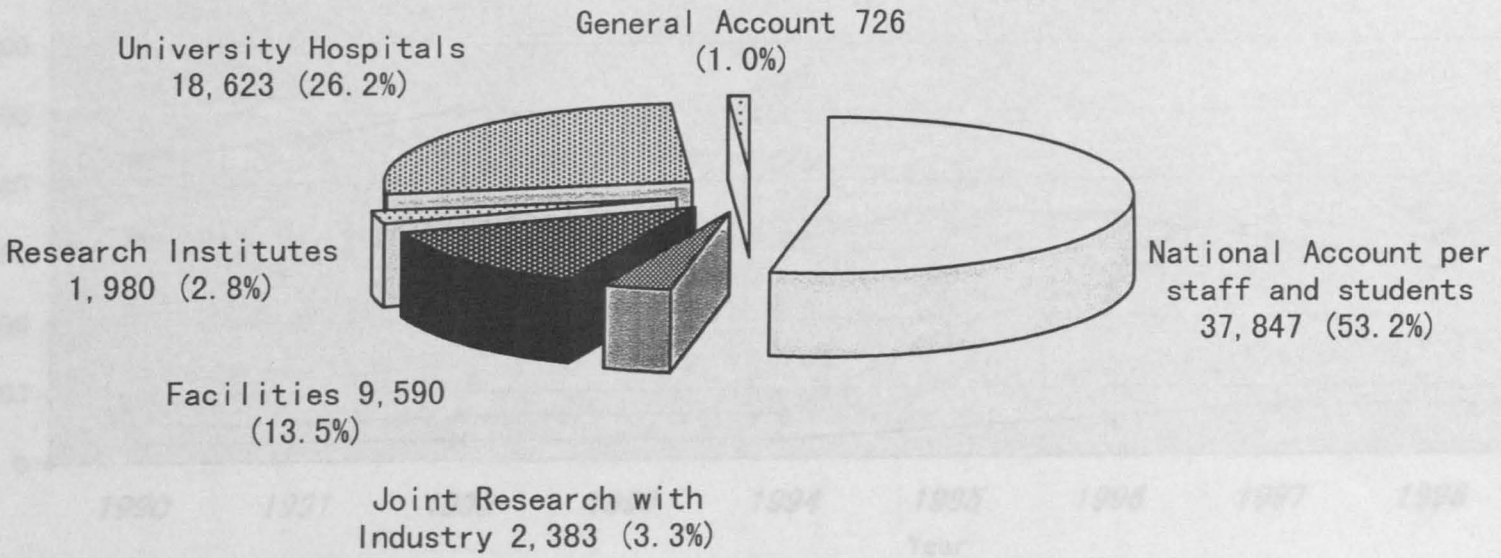
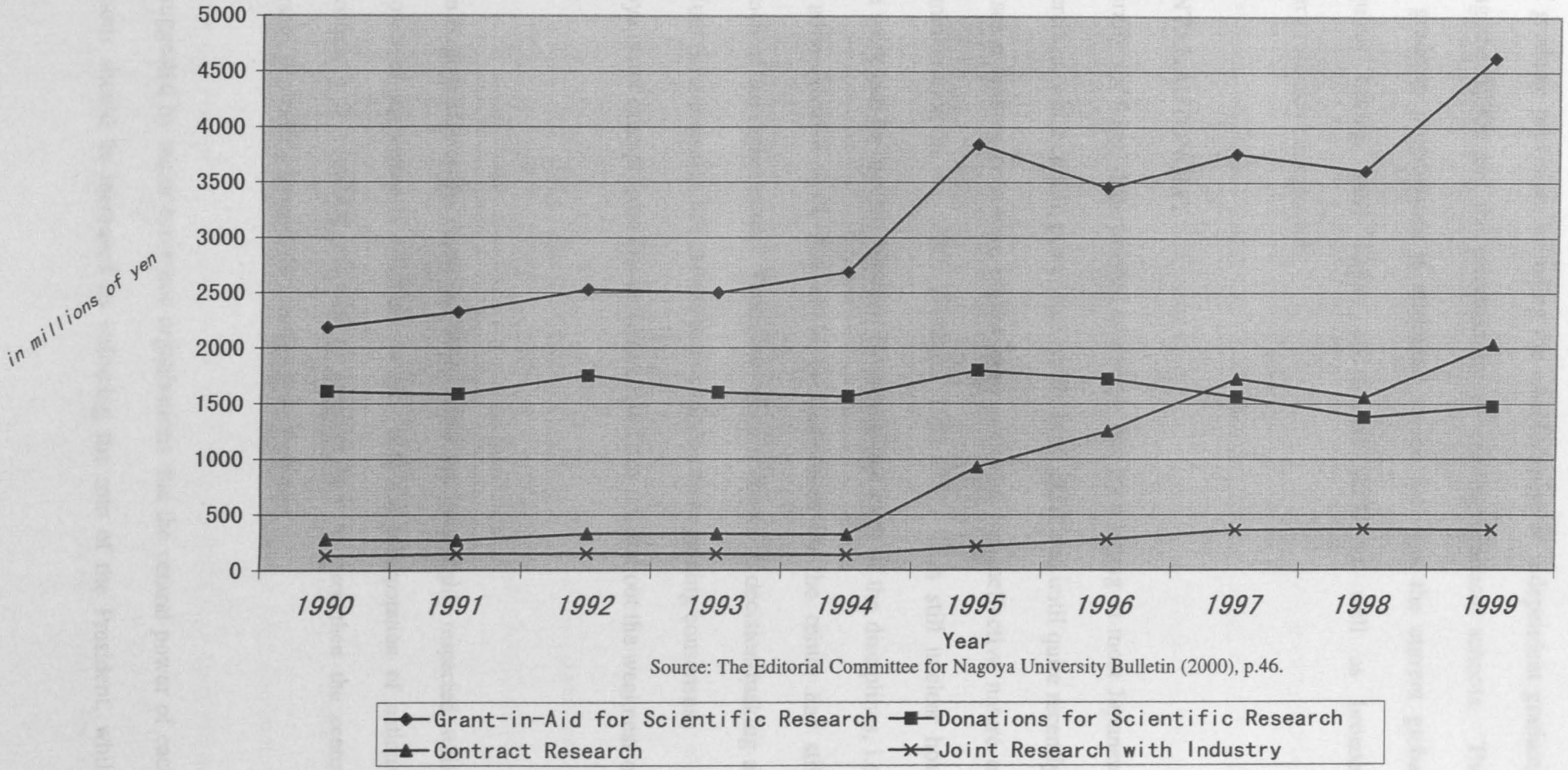


Figure 6-6 External Revenue Sources of Nagoya University



Source: The Editorial Committee for Nagoya University Bulletin (2000), p.46.

renovation of graduate provision, including the establishment of independent graduate schools during the 1990s and the prioritisation of existing graduate schools. The emphasis on graduate programmes is attributed to the fact that the current global situation requires having more highly specialised skills as well as broader interdisciplinary research backgrounds.

DEPARTMENTAL AUTONOMY

Generally speaking, departmental autonomy has been strong in most Japanese national universities, while central power had hardly been exercised until quite recently. That is why some leading economic bodies have criticised the ineffective nature of university administration in the 1980s [Schoppa 1991:126]. It is still unclear how administrative work can be divided between the centre and each of the disciplines, i.e. some purely administrative work that could be undertaken by the centre has still remained in each of the departments. Therefore, when it comes to decision-making as an institution, the current system has always been a hindrance to gaining consensus.

Nagoya is not exempt from this criticism, and J has pointed out the weakness of central power:

> Within Nagoya University, departmental autonomy has been highly respected, while the power of the centre is relatively small. With the incorporation of national universities, it is becoming essential to consider how to strengthen the central leadership, particularly through the conduct of the President.

It is suggested by major economic organisations that the central power of each of the institutions should be increased by enforcing the role of the President, while

rationalising the whole structure of administration [Schoppa 1991:126]. In response, the current President Matsuo has kept delivering his up-to-date message and personal views on current university issues on the university website (www.nagoya-u.ac.jp/ JAPANESE/INTERNAL/PRESIDENT/tayori. html) almost every month since January 1999, in order to improve interaction between the centre and each of the departments as well as between the centre and individual members of staff and students. Though Matsuo has realised the need for the increase of central power, he feels that it should be considered in the light of the need of each institution, and not be initiated by any external forces [Matsuo 1998:3].

6-3 Institutional Reaction to the Government's Proposal

EXPERIENCE

Nagoya began to prepare for its 'self-evaluation' several months before the government's official announcement delivered in July 1991. Each of the departments was informed of the change in November 1990 in order to consider methods and practical procedures of the assessment. In December 1990, with feedback from each of the departments, the President formally advised of the creation of the Institutional Committee for Self-Monitoring and Self-Evaluation (the so-called 'Self-Evaluation Committee') within Nagoya. On 22nd January 1991, this proposal was approved by both the Faculty Heads Committee and the Consultative Committee, and the new Self-Evaluation Committee was officially created in March 1991, comprising 12 academic staff who are representatives from departments and research institutes. All members of the new Committee were formally approved on 16th of April 1991, and they started regular meetings the following month.

A year later (24.3.1992), the Committee delivered its overall strategy for the

first report of Nagoya's Self-Evaluation, and following that, the first Self-Evaluation Report (1992-1993) was published in January 1993, covering every aspect of the university. Two years later, the Second Self-Evaluation Report (1994-1995) was revealed in January 1995, reflecting achievements over the past two years and specifying the future strategy towards institutional reform. In contrast with the first report, the second one narrowed down its focus, selecting particular aspects that had urgently needed consideration. In addition, as a new perspective, the Committee conducted a survey of employers in the *Chukyou* Area by sending a questionnaire to private companies which had taken graduates from this institution over a long period of time, asking them a number of questions, e.g. how they honestly feel about Nagoya's graduates, what they expect of them and what kind of people they want from Nagoya in the future.

In the meantime, under the jurisdiction of the President, Nagoya University's External Forum was created in December 1992, comprising local councillors, representatives from leading economic bodies, journalists, academics and specialists from various fields. All of them were appointed by the President, and they have had a regular meeting twice a year since April 1993, producing a new interaction between the university and local intelligentsia. This movement was a novel trial even among Japanese HEIs, and later prompted the formation of an 'external committee' within each department. However, the External Forum has not functioned as a practical 'external evaluation' at the institutional level, since it did not go beyond the style of a discussion meeting.

For the third self-evaluation the Self-Evaluation Committee developed new criteria, particularly focusing on the improvement of graduate schools and some newly established research institutes. Apart from this, the Committee commissioned a

questionnaire survey of all overseas students, resulting in a short summary entitled *Nagoya University from Overseas Students' Perspectives.* Based on this, the third Self-Evaluation was completed in January 1997.

GENERAL PROCEDURE IN BETWEEN EVALUATIONS

Generally speaking, institutional self-evaluation is inaugurated by the President's announcement, asking each of the departments to present their views on methodologies and possible procedures for its implementation. The outcome of this consultation process is then disseminated to individual members of staff through representatives from each of the departments, and the matter is then discussed at the departmental level. Later, feedback from all the departments is given to the President, who will then advise the creation of a preparation committee for the next institutional evaluation (which will later become a 'Self-Evaluation Committee'), assigning 12 members including representatives from each of the disciplines and research institutes. Thereafter, the discussion is mainly taken over by the new committee, starting with setting up criteria for the next assessment. Once the new committee has reached a stage to issue a blueprint of its strategy, it is approved by the Consultative Committee, and its contents are once again dispatched to each of the departments in order to see their reactions to the new proposal.

With the departments' feedback, the new scenario becomes more refined, and the preparation committee once again sends its revised report to the Consultative Committee, which will then become a formal draft for a new self-evaluation report. Following this policy, each of the departments as well as research institutes is supposed to provide all information required, by conducting surveys and building up a database. Based on this draft, the Administrative Bureau starts to be engaged in the practical sides

of the matter, i.e. contacts with publishers, so that the new report will be issued by an appropriate time. The completed report is then sent to the Ministry of Education, other HEIs, all high schools in the *Chukyou* area, private companies who have accepted Nagoya's graduates, and some other relevant public and private institutions. It is also available to visitors at the Information Plaza within Nagoya University.

MANAGEMENT STRATEGY

Throughout its past evaluations, Nagoya has stressed the enhancement of its originality, without referring to other universities. Its criteria are, therefore, completely based on internal needs and demands. For instance, the university has not followed the ready-made JUAA manuals, since it does not have membership of the JUAA and has not shown willingness to be involved. The past exercises of institutional evaluation from the first to third reports (published in 1993, 1995 and 1997) have, in this sense, achieved its objectives to a degree, and Nagoya had originally planned to publish the fourth report in the same style. However, in response to rapidly changing demands from society and possible preparations for incorporation, Nagoya decided, at the meeting of the Self-Evaluation Committee held on 10th of July 1998, not to publish these summary-style evaluation reports any more.

Instead, in order to deliberate on a new strategy towards the fourth evaluation report, Nagoya set up a working group within the Self-Evaluation Committee. As the Chair of this new working group, **J** reflects on its discussion:

> Part of our problems over the past exercises is that we were too inexperienced to conduct any kind of assessment, not having paid sufficient attention to the different characteristics of each of the disciplines or to the university as a whole. Moreover, we

> had merely focused on disclosing internal information to the public through issuing a report, rather than considering the meaning of 'evaluation' itself. This is why we are often criticised as "it tends to be perfunctory, and does not exactly function as it says". What we need is to establish a more elaborate structure to discuss purposes, criteria and appropriate methodologies towards the most suitable evaluation for us, being backed by adequate human and physical resources.

With this in mind, the working group had had intensive meetings, resulting in 'A Draft for Nagoya's New Self-Evaluation' on 4th February 1999, covering purpose and criteria of self-evaluation, formation of a future strategy, and methods of showing 'accountability'. It was mostly approved by the departments, the Consultative Committee and the Self-Evaluation Committee, and the formal report 'New Strategy towards Nagoya's Fourth Self-Evaluation' (the so-called 'Academic Plan') was revealed on 16th September 1999.

In the new report, a number of issues are presented:

1) Reconsideration of the needs of 'self-monitoring' and 'self-evaluation' in accordance with social changes;

2) Clarification of the drawbacks of the previous system;

3) Specification of the concepts of 'monitoring' and 'evaluation'; and

4) Clear separation of the contents between institutional evaluation and departmental evaluation.

In elaborating these issues, the working group reached two main proposals. One was the establishment of a new Self-Evaluation Committee. The new Committee should be co-ordinated by the centre with a good number of management staff headed by

the President. It should be left totally independent from any existing management section, either by abolishing the present Self-Evaluation Committee, or by drastically re-organising the present Self-Evaluation Committee with stronger management backing. In the process of setting up the Committee, members could be chosen from those who are in a position where s/he is able to focus on this job, and the number of those members should be limited, in order to facilitate substantial discussion. The Committee has to continuously seek an institutional strategy towards evaluation by involving various viewpoints of all stakeholders within the institution, as well as analysing other HEIs' self-evaluation reports more seriously, so that it can judge its institutional progress and achievement from a comparative perspective.

The other main proposal was the creation of an (institutional) 'External Evaluation Committee', apart from the existing Nagoya University's External Forum. The new Committee is envisaged as a group of specialised people who will be able to support and advise Nagoya University correctly from well-balanced viewpoints, and it should be totally independent from the institution as well as from any third party evaluation. It is stated that this external evaluation should be used to judge the appropriateness of institutional self-evaluation and provide analysis on the logical reasons for the result.

In this proposal, some priorities of assessment are specified. With regard to research, institutional focus is given to:

- those concerning Nagoya's institutional mission: what kind of research Nagoya is good at, what sort of research only Nagoya can produce and contribute to, and to what extent those efforts were made, whether or not Nagoya has ever generated any unexplored research field by itself, etc.
- those concerning institutional activities: international collaborative work, Nagoya's

contribution to the 'centre of excellence', research environments for students and staff, Nagoya's contribution to the community, Nagoya's fulfilment of social demands, accessibility, etc.

- those concerning the infrastructure to be able to make correct judgements: internal research allocation, availability of external research funding and efforts to gain those, appropriateness of present management, libraries' facilities, availability of human resources including management staff, protection of ethics of research, maintenance of safety and security of the research environment, treatment of disposals produced by chemical experiments in some research institutes, etc.

In selecting each element of assessment, it is suggested that it should not specify all the details until they are proved to be measurable.

In terms of intervals between evaluations, the new strategy specifies that, after conducting the first assessment, it should settle down to 4-5 years intervals, judging from the general cycle of university teaching and research, administration, time required for feedback, management procedure in each of the departments and previous experiences. It is also suggested that a new fourth evaluation report should be accessible for any of those who have an interest in Nagoya and should be made as transparent as possible. On the extent of the use of quantitative data, it is stated that, for example, research assessment should not be measured by the number of papers published, but by consideration of the traits of each individual's research, placing their progress in chronological order.

The ultimate goal of the new arrangement is to improve the quality of all institutional activities and to strengthen the institution's ability to present itself as a highly regulated institution, so that it can receive more public sympathy, eventually

resulting in the attraction of more funding from central government in the future. It is also intended that, for Nagoya's future evaluation, a new strategy should always be ready to be refined within flexible ranges.

LIMITATIONS

Some limitations are pointed out by key figures within the institution. Firstly, the President reckons that the academic staff's enormous workload that used to be spent on research and teaching has to be turned on this assessment work, and this might distract them from devoting themselves to their R&T [Matsuo 1998:3]. With regard to this, **J** confesses the present state of the Committee:

> All members of the (Institutional) Self-Evaluation Committee are representatives from each of the academic departments who are *unlucky* enough to have been charged with this institutional evaluation. Once we are nominated, we have to spend 'some' of our time on this tremendous amount of work at the expense of our substantive time for research and teaching. Since we have to cope with both administration and our own R&T, we are unable to use all of our time to concentrate on institutional assessment, and therefore, our work on this evaluation matter tends to be sloppy and irresponsible. However, all our members have realised that management work for this institutional evaluation would never sufficiently be achieved by this half-done attitude in our spare time. In addition, most members tend to do their evaluation work in-between their R&T, there is a substantial loss of time in terms of fruitful and continuous discussion for a better strategy. Moreover, since our work on this administration has not been measured by any quantitative scale, it has not seriously been considered as a problem. Consequently, there is an imbalance in the allocation of administrative work between those who are charged with this kind of vital institutional work and those who are

entirely free from it.

All in all, J stresses that there is an urgent need to create an independent management section which can entirely focus on institutional evaluation, co-ordinated by appointed specialists. This is because, under the present conditions, all have realised that it has been tremendously difficult for existing academic staff who are engaged in institutional self-evaluation work to view the whole picture of this large-scale institutional reform, having been exhausted by their burden of work.

Secondly, the President doubts whether the right balance will be achieved between institutional evaluations and the nationwide third party evaluation. Although the leader of the university admits the importance of plural forms of assessment, he suspects that the increase of government interference through the third party evaluation might become detrimental to enhancing institutional missions.

6-4 Departmental Reaction: The Case of Scientific Department α

Established in 1951 in *Anjou* City, which is located on the eastern outskirts of Nagoya City, Department α had started its operation with 4 academic divisions. During the first decade, though there was only a small number of academic staff and students with limited facilities, staff and students had worked hard to improve their conditions. The department has grown steadily and two divisions were newly attached, resulting in an increase in the number of staff and students. In 1965, when the department's campus moved from *Anjou* City to *Higashiyama* campus, several research centres were founded as the first research units affiliated to the department.

The discipline of this department is concerned with studies on the production, processing, distribution and increasingly efficient utilization of the biological resources

created by a variety of activities which are mediated by air, soil and water and based on solar energy. These studies intend to create novel principles and technologies to ensure a sustainable production of biological resources and to solve various environmental problems which are originally derived from human activities. The department promotes a high level of education through advanced research into bio-resource production, the biological environment and advanced biotechnology derived from bio-science and environmental sciences which provide the foundation for agricultural advances.

In the 1990s, this field stood at a focal point, connecting the urgent needs of humankind with the recent remarkable progress in understanding basic biological mechanisms, since there has been a true revolution in methods to study fundamental biological processes within the past 10 to 15 years. It is the pressing job for scientists in this field to consider how to take this exciting new knowledge and to shape it to answer specific questions.

The department was reorganised in April 1993 to adapt to these rapid developments and the borderless expansion of each field in the discipline, followed by further expansion between 1997-1999, including the introduction of new cross-disciplinary courses. By 2001, Department α had more than 100 academic staff and about 1000 students.

The following sections are derived from individual interviews with the current co-ordinator of departmental evaluation [**P**] and the Chair of this department [**R**], as well as documentary analysis, and these two interviewees are later examined at an individual level as well as with others in the section 6-6.

EXPERIENCE & STRATEGY

Departmental evaluation was initially prompted by two different factors:

- The need to react to the government's policy.
- A sense of crisis towards the future prevailing among academic staff within the department, having perceived an increasing gap of understanding between other fields of the public sector and HEIs regarding what is required in society.

In practice, following the institutional reaction to the establishment of the (institutional) Self-Evaluation Committee in March 1991, the (departmental) 'Self-Monitoring and Self-Evaluation Committee' was created within the department in June 1991, which was the first trial of department-based evaluation in this subject area across Japan.

Initially, there was no idea of inviting external assessors, and the Committee concentrated on collecting all necessary data on departmental activities over the past few years (1987-1991), and the outcome was published in March 1992 as the first self-evaluation report of the department. In the same way, the second self-evaluation was completed in March 1994. In **P**'s view, however, "the first two reports are just like summaries of all departmental activities over the last few years" and nothing more than that.

Since the mid-1990s, the Committee had begun to consider the limitations of its self-evaluation in terms of objectivity and effectiveness, reflecting what is expected of this department by society. In this process, wider perspectives were stressed in order to identify clearer tasks for the department to carry out. Consequently, the Committee decided to introduce 'external evaluation'.

In July 1994, the first External Review Committee was established, and its review was conducted in December 1994 as the first 'external evaluation' and the content was published as 'the First External Review Report' in May 1995. It was

intended to consider what the role and characteristics of the department were compared to other departments of the same discipline across the nation. The Second External Review was accordingly conducted in March 1996 in the same style but largely by different assessors, and it was published in November 1996 in the same way as the first external evaluation report.

In terms of selecting assessors for external evaluation, the department intends to include a broader Asian perspective, since it is more and more required to enhance intellectual interaction with other Asian countries, considering a number of issues which most Asian countries have faced in common relating to this discipline. For instance, the department invited a Taiwanese expert to its first external evaluation, who had been in Japan as a visiting fellow. A Western expert was also invited. Additionally, the department invited various Japanese experts who could measure values of science from various perspectives: one from a relevant governmental ministry, one from a company's research institute, one from industry, one from an experimental centre, one from journalism, one from a practical field and one from another HEI.

In 1999, apart from building up a database, the co-ordinator conducted informal interviews with each member of staff, asking the most appropriate way to improve their research environment as well as the management structure. As a result, it was found that clear-cut criteria should be built up and, above all, attention should be paid to considering how to assess those who are at the edge of the subject and/or have interdisciplinary research. With regard to research assessment in particular, it was suggested that the department should create a more specialised assessment form by selecting key elements only so that this would directly benefit the quality of research. In order to promote this (and hopefully to ease P's workload), each member of staff has been encouraged to update his/her research brief on the departmental website, in

association with the Committee for Information Technology created by general staff of the department.

The latest publication includes the Fourth Self-Evaluation Report (March 2000) and the Third External Review Report (August 2000).

DEPARTMENT'S VIEW

With regard to the department's reaction, **P** says that "it is not any more the time to consider what we would prefer, but the time to take it strategically in order to cope with the government-led third party evaluation". Though original incentives largely came from external forces, the department attempts to respond subjectively and proactively in order to create a competitive atmosphere among members of staff and to facilitate its relationship with the public. In order to achieve the latter, for instance, the department tries to use plain words, rather than technical terms in writing up a draft for publication, so that it could attract not only experts but also ordinary citizens who might show an interest.

According to **P**, though the outcome of internal assessment might not comprehensively reflect all activities within the department, it is considered meaningful to measure part of the department's achievements at a certain stage to see its productivity. Since most of the academic staff agree with the need to monitor their activities at regular intervals as well as to increase its publicity, **P** has hardly seen any serious trouble in gaining consensus among members of the department. This is partly associated with the fact that there is no redundancy of staff depending on the outcomes.

In terms of the management of departmental evaluation, however, problems remain unsolved. For instance, as a co-ordinator, **P** confesses the enormous amount of time he has had to spend in the preparation of departmental 'self-evaluation' at the

expense of his time for R&T:

> It certainly has negative impacts. I have no time to do my own research, no time to even talk to my students. However, I can't reject this job, since I feel that it is not worth employing any particular specialists to work on this only. In order to solve my present situation, I try to ask general staff in our department to do all practical aspects of the jobs, while I myself am focusing on planning our departmental strategy. I also use my PC as much as possible to reduce paper work. I really hope that this work can be shared with some other members of staff so that I can generate more time for my R&T.

This has caused a vicious circle within the department, i.e. no time for feedback, no time to consider clear explanations to the public/non-specialist. Moreover, it is suspected that some members of the academic staff who are not involved in this administrative work have not even read the reports through as yet.

INTERACTION

In general terms, it is considered that exchange of views with other institutions is a useful way to create mutual friendly relationships, as well as to promote co-operative research. When it comes to evaluation, however, the department has not established any particular link with other HEIs, since it is proud of producing "the best evaluation reports" among all of the same departments across the country, and according to **P**, the department does not necessarily have to adjust itself to overall tendencies, as long as it possesses its own objectives.

Yet, in the future, the department is planning to have extended discussion with other departments in the same subject, including specifying the role of each department

among all the departments of the same subject area in the country.

Meanwhile, the department had a meeting with representatives of similar subject areas from seven UK universities in January 1999, having exchanged viewpoints on the issue. **P** feels that, if one merely seeks rationalistic ideas, s/he will ultimately reach a similar system to the RAE. However, with Japanese cultural characteristics, he is doubtful that Japan can pursue the same course.

DEPARTMENTAL AUTONOMY

At the time of their interviews, both **P** and **R** saw certain room for discretion given to the department. Ideally, they would prefer a system where both institutional and departmental views are evenly considered and reflected in both institutional and departmental evaluations so that institutional and departmental autonomies are respected. In reality, however, **R** feels that the present departmental evaluations should be reorganised and integrated into the whole institutional evaluation, since authoritative power has certainly begun to be shifted to the centre of the university. In **R**'s view, the present system of self-evaluation at the departmental level, if remaining as it is, will be unworkable shortly after the incorporation of all national universities, due to the lack of finance and management staff.

6-5 Departmental Reaction: The Case of Non-Scientific Department β

Having started its operation in early 1990, Department β takes on a unique role. The international environment for developing countries has undergone drastic change. While globalisation brought rapid economic growth to East Asia in the first half of the 1990s, it also had thrown the area into economic crisis after the outbreak of the Asian currency crisis in 1997. Under these circumstances, it was going to be one of the

most pressing tasks for Japan to take initiatives in Asia, by developing its own strategy and restructuring its international cooperation system.

However, Japan's capability for this is currently at 'an incipient stage' [Department β 2000:2]. Despite benign intent, cases abound in which the interest of the recipients is compromised with that of the donor, and that could be detrimental to the natural evolution of developing countries. In a broader perspective, this implies that the validity of development theories, policies and practices thus far pursued by industrialized nations are being challenged by the realities of the Third World, calling for urgent efforts to establish institutions where prospective development specialists could be engaged in research, education and training in this field.

In response to this, Department β was created in 1991, at the same time as the government's proposal on the expansion of graduate schools. The central aim of this department is to contribute, in its modest capacity, to the exploration of knowledge and development of human resources essential for self-reliant development of Third World nations, in which indigenous values and lifestyles are respected.

The department consists of about 30 academic staff and more than 300 students including a large number of overseas students particularly from Asia in the year 2000/2001. The following account is based on an interview with the current co-ordinator of departmental evaluation [U], as well as documentary analysis, and U is later analysed at an individual level as well.

EXPERIENCE & STRATEGY

In accordance with the institutional move to establish the Self-Evaluation Committee in early 1991, a (departmental) 'Committee for Self-Monitoring and Self-Evaluation' was created a year later (April 1992). The Committee specified a

departmental strategy towards the first self-evaluation in October 1992, covering all departmental activities over the years 1991-1993. Two years later, the creation of an External Review Committee was announced, and the First External Review was conducted in March 1995. Meanwhile, the second self-evaluation was completed in January 1996.

After the department published the second self-evaluation report, however, departmental strategy was reconsidered in association with institutional reflection on all self-evaluation activities within Nagoya. U reflects on past departmental experiences:

> Our first evaluation was just like a collection of data, self-praise style... Second one was... like a minute of informal discussion, though we began to include external assessors in our second self-evaluation... and finally towards the third one, we have seriously changed our policy... we began to consider the most appropriate method for us to assess ourselves more seriously, spending a great deal of time on it.

In fact, after the second review, the department began to scrutinise all its activities through a feedback process so that the next exercise would be connected to future improvements. The focus on the third self-evaluation was to include various viewpoints which suited the nature of the subject:

1) Developmental and evolutional viewpoints;
2) International and/or global viewpoints;
3) Viewpoints of equity, objectivity and clarity;
4) Comparative viewpoints based on external standards;
5) Viewpoints of efficiency and continuity; and
6) Knowledge and proficiency of individual researchers from the viewpoints of

international aid and teaching abilities.

In order to cover these perspectives, the department commissioned a comprehensive survey on students' perspectives of departmental activities in July 1999 through questionnaire and interviews with each individual student, intending to include their voices in the next report. Accordingly, the third self-evaluation was completed in December 1999, followed by the re-examination of its report through the Second External Review which was held in January 2000.

In selecting external assessors, it was decided to include various perspectives from a range of experts. In its second external evaluation, for instance, the department invited: two from other HEIs in the same field, one from a governmental co-operation agency, one from a private research institute, one from an international organisation and two overseas academics. In that round, according to U, priority in selection was given to those who could make a judgement as strictly as possible, without considering future private relationships between internal members and external assessors. Once assessors were nominated, therefore, they were asked to comment on various aspects of the department straightforwardly, avoiding any perfunctory form of expression. In practice, the department asked external assessors to comment on its work in 5-6 pages of A4 size format, which were then presented to the meeting of the (departmental) External Review held a month later. In that meeting, attendants included external assessors, members of the Self-Evaluation Committee, Dean, Heads from each of the twelve departmental committees and 6 PhD students.

DEPARTMENT'S VIEW

It was reflected that, in this newly established subject area in Japan, since its

internal structure has not matured as yet, they have had to face repeated difficulties through trial and error. Yet, most members have felt that a strong dynamic has been created to re-examine the role of this discipline as a result of the following: changing perception towards this subject, changing role of Japan in this field, and political and economic changes in Asia and other third world countries. With regard to this, the department tries to develop particular strengths in areas which only Japan can contribute to, and in this sense, all members of staff have realised that it is time to reconsider what they are truly required to do when conducting an appropriate evaluation.

However, with the reduction in the number of full-time general staff, caused by the government's redundancy policy for public servants, **U** feels that the question of how to tide over the current difficulty should be seriously considered. As a co-ordinator, **U** confesses that, being engaged in this job has already exceeded his limitations, preventing him from generating substantive time for R&T. Therefore, the department argues about how to enrich its management section for an appropriate departmental assessment, e.g. creating a new post of 'management director', apart from the present co-ordinator selected from members of academic staff.

Moreover, **U** explains that, since all members of staff are engaged in different kinds of administrative work, they had been unable to discuss their overall strategy towards (departmental) self-reform sufficiently. Besides, there is a gap in consciousness towards reform between academic staff and students. Since this department comprises a large number of overseas students, accounting for more than half of the whole student numbers, it is enormously difficult to make them understand what role the department should take by asking them to get involved in internal evaluation.

INTERACTION

At present, the department has a regular meeting every six months with representatives from the departments of same subjects in other HEIs based in Hiroshima, Kobe, Waseda and Saitama. In the meeting, a wide range of views are exchanged about departmental strategies on university reform, the way in which departmental evaluation is implemented and possible interactions of staff and students between their institutions.

At the international level, the department has a link with a department of the same discipline in Sussex University in the UK, and in the third external evaluation, one visiting fellow from Sussex was nominated as an external assessor.

Looking ahead to the future, it is suggested that, in the light of the nature of this discipline, interaction should be enhanced not only with the departments of the same subject, but also with those of different subjects so that the curriculum can more closely meet reality.

DEPARTMENTAL AUTONOMY

As a co-ordinator, U feels that departmental autonomy is still highly respected, since all the procedures and contents of the departmental reform are determined at departmental discretion. Even when it comes to external evaluation, all strategies and feedback are derived from the ideas of the department. Yet, with the expansion of central power within Nagoya University in recent years, U says that it is more required to improve its management strategy towards departmental evaluation in order to attract sufficient research funds in internal resource allocation, while maintaining the decisive power over assessment itself.

6-6 Individual Reaction: The Case of Scientific Department α

Most interviewees selected for this and the next sections are senior established

figures, and therefore, they have already had long careers as academic researchers. However, since the nationwide third party evaluation is still under preparation, some of their comments tend to be patchy and prophetic.

PERSONAL EXPERIENCES

A member of staff [T] who has experience in working for industry takes a positive view towards the introduction of assessment, feeling that it will settle down in due course. He always looks at things with a long-term perspective ranging from 1000 to 2000 years, supposing that "we just happen to live in this period of time" which has tended to neglect measuring individual abilities independently, and in his view, there should be no reason to reject it. When a senior member of staff [**Q**] first heard of the introduction, he was impressed by the fact that some leading economic bodies had begun to focus on the state of universities in Japan. In reality, **Q** stresses the urgent need for more funding for science, and it is undoubtedly necessary to have a method to allocate limited resources, and in that sense, it is meaningful to check on one's ability at regular intervals. An old member of staff [**R**] who has been in the department since 1977 feels that the current emphasis on evaluation might encourage all those who are engaged in research, since some members of staff had not produced reasonable outcomes before the implementation of the present system. Another member [**P**], who has had experience working as a researcher within a private company's research institute and has been in the department since 1983, agrees with the idea, as it is "a matter of life or death" in science whether or not they can obtain sufficient financial support.

IMPACTS

Since the outcomes of institutional as well as departmental evaluation have not

been linked to funding for individual research, no serious influence is reported by any interviewees, though they have indicated possible impacts they have perceived so far. **T** has always had a sense of anxiety in his mind, though his research itself has not very much been affected by the present system. **T** fears that every researcher in the university might start to adapt their work to the system of evaluation in the process of implementation. **Q** has certainly seen a clear difference in managing his time compared to the past, while being afraid that research in all national universities might be manipulated for the state's immediate gain and short-sighted benefit. **R** feels that the present system has not motivated him to improve his research activities. **P** points out one discernible impact in that everybody has begun to care about what others do, and he feels that it is, in a sense, a positive effect of assessment to see one's own research in a wider context, though he is doubtful that the system will benefit his research in the end.

VIEWS ON THE PRESENT MECHANISM

T criticises the lack of adequate feedback under the present system, which might have discouraged the motivation of individual researchers towards assessment. However, **T** also wonders if anyone can establish a single feasible standard and who could assess others in any objective way, whilst stressing the importance of respecting plural viewpoints. **Q** does not regard the present initiative as a drastic reform, since under the present conditions, the funding has not been directly linked to either institutional or departmental resource allocation. In addition, since lifetime employment is still dominant among academics not only in Nagoya but also in most Japanese universities, their jobs have not seriously been affected by the outcomes of assessment. As for assessment formulae, **R** does not appreciate the present method, since some of the details overlap with the existing methods adopted by academic societies, e.g.

consideration of impact factors, the number of papers published in particular journals.

With regard to the new third party evaluation, **T** and **Q** assume that interference by external forces might be strengthened, making university environments unhealthy and more vulnerable. On the contrary, **R** indicates that it can just be another way for self & external evaluation, since most of the assessors and co-ordinators selected by the NIAD would be university staff themselves, though he appreciates the fact that it is going to be a competitive rival for the existing system conducted by each of the HEIs. In order to successfully achieve the co-existence of plural forms of evaluation, **R** suggests that:

> It is now vital to consider how original each of the institutional evaluations is, and it is time for each of the HEIs to refine its original ideas and criteria against the government-led evaluation through its institutional evaluation process. If they see any tensions and/or conflicts between their ideas and what the government has proposed, that is what has been neglected for a long period of time in the history of national universities. Throughout their histories, most national universities have not protested seriously against the government, while just following its policies no matter what the contents are... with the incorporation of all national universities, it is time to alter these passive attitudes. We should propose from our side, and discuss with the government. That would be the most favourable relationship between the university and the central government.

According to **R**, conducting institutional self & external evaluation will become a key to maintaining the right balance with the government. However, **R** does not have any clear idea as to 'how', since there are enormous matters to consider before taking practical action.

All in all, **R** feels that it has not reached a stage when a meaningful assessment can be carried out, since an objective has not clearly been built up. It is still on its way to developing clearer goals, and **R** stresses its importance:

> In principle, evaluation is a means of measuring achievement. In order to judge one's achievement, there should be clear-cut targets. It is most important to consider how rich you would have your own objectives and criteria, and that is the most sophisticated aspect of evaluation. It would not be difficult to create and judge other features.

In order to improve the whole system, **R** indicates that there should be more research conducted on research assessment from various aspects, i.e. methodology, impacts and future possibilities, and it should be universities (not the Ministry of Education) that should speculate on the meanings of evaluation. **R** hopes that this kind of research would always be updated through a well-balanced feedback process.

CURRENT PROBLEMS

Some informants pointed out several limitations. Firstly, most interviewees express the lack of their management skills. In **R**'s view, considering the size of the department and the number of academic staff, it would require at least 7 people who could concentrate entirely on evaluation work. **R** expresses how unpleasant their present conditions are:

> It is all nonsense to allocate the same amount of research money to each member of staff, although it is being slightly differentiated per head of the students we have. All

> of us are asked to teach undergraduates and postgraduates, supervise postgraduates, conduct our research and other administrative work under the same conditions. In this system, how could we improve ourselves and train future brilliant researchers? If we were asked whether or not we would want any management specialist, we would definitely answer 'yes'. However, we wouldn't have any within the department. And even outside, I wonder if there was any appropriate figure somewhere in this country.

As far as **R** has seen, Nagoya has not been able to meet the needs of effective management either institutionally or departmentally, while management workload has unevenly inclined to the President, Vice-President and those who are more directly involved in institutional and departmental reform.

Secondly, their concerns centre on the role of universities with the increase of 'accountability'. With regard to this, **R** elaborates:

> Once the state of the nation's economy gets worse, the government starts to say, "We have to concentrate our research money on particular subjects (which have quicker benefits to the country)" by reducing the cost of other studying areas while asking the university to do more 'beneficial things' for society. Then, who is going to be able to save the life of traditional and longstanding subjects: math, physics, literature, which, in a long-term view, would certainly contribute to society? It is only the university which could do this with its own sense of values. What we definitely have, unlike those outside the university, is the theory of the academic world, and we should secure such a 'core' of the academic world regardless of numerous social changes. Some of our research might at first appear with a question "What is it for?". However, it might unexpectedly thrive at a later stage if we leave it as it is, and that is what the university is required to preserve with its own dignity and responsibility.

According to **R**, most researchers have forgotten the post-war notion in Japan that education is entrusted to the hands of each educationist and all members of the academic staff have a degree of academic freedom to be engaged in any kind of research they prefer. **R** reflects that, at the beginning of the post-war period, all were really against the idea of pursuing efficiency in resource allocation, and there was a growing tendency for individual members of staff to deeply feel their educational responsibilities to the public, as opposed to the pre-war bureaucratic nature of the university. In **R**'s view, the education system in those days was certainly independent from any bureaucratic power. However, that spirit did not develop throughout the post-war period, rather being obedient to the authoritative power.

On this point, **Q** strongly fears that each of the universities might lose their own mission to play a particular role in society, whilst being re-designated their roles within a narrowly defined focus. At an individual level, **Q** points out that the present system of evaluation might go in the wrong direction where the possibilities of enhancing one's potential and the healthy development of academic research would be deprived. Therefore, in assessing one's work, according to **Q**, one should bear in mind that academic research has a variety of bearings, and all the directions should be respected for the nation's development in the long run, regardless of their short-range benefits. From a pragmatic perspective, **T** feels that it is a matter of degree between seeking the truth of science and responding to social needs, and it takes enormous efforts to find the most appropriate equilibrium. In **T**'s view, the university should always consider to what extent they can go with the times, exploring the most appropriate inter-relationship between the nation and the university from both short and long-term perspectives.

Thirdly, some informants comment on the lack of serious reaction from

academics. **R** is particularly ashamed of the fact that what is called 'university' has had to be manipulated in detail through the recent reports proposed by the government:

> The reports presented by the University Council have gone into minute details. Those specify every portion of the university... how we should do this, how we should do that... as if we are unable to consider anything by ourselves. I wonder why the university had remained unchanged until this miserable moment? The reports are all written by members of the Council, but most members of the Council are academics, so they are on our side, then why have we not been able to actively react to them by showing our alternatives? We should consider this question more seriously. Yes, each of the individuals has certainly thought about that. However, as an organisation, the university has never ever taken any initiative to present its own viewpoints.

FUTURE PROSPECTS

In Japanese universities, almost all members of academic staff are currently charged with both teaching and research, whatever title they have. Some suggestions were made on this. **T** would prefer that one could decide the most appropriate job for her/him among the three main roles of academics (teaching, research and administration) at a certain stage of her/his academic career and focus on that role only, since **T** respects a sense of 'satisfaction' in doing any kind of job. On the other hand, **R** still cannot reach any conclusion as to whether or not the institution should separate teaching from research, depending on individual traits and characteristics. In **R**'s view, the university should interweave teaching and research in some way or other in the light of its mission, although it might be preferable for the institutional management to designate the work of individual academics to a particular aspect, depending on the needs of each department.

Q hopes that the university will never lose its original role to continuously seek

truths and create a sense of value, no matter what kind of evaluation has been introduced. The most important thing, according to **Q**, is to enable the university to evolve itself through meaningful evaluations.

From a practical viewpoint, **P** confesses that the institution should get rid of the principle of equality through more drastic use of evaluation, and more money should be focused on the highest quality research in order to reallocate limited laboratory spaces, while external funding resources could be more proactively explored. In order to achieve that, **P** feels that funding should be urgently linked to staff promotion and redundancy, and that this would be the only way to change rigid attitudes towards evaluation.

ALTERNATIVES

Though it is still too early for all interviewees to consider any feasible alternative, some suggestions were made.

The system should:

-be more streamlined.

-clearly assess 80 per cent of one's work, but leave the rest untouched (semi-structured).

-not permeate logistic and/or rationalistic ideas from the beginning to the end.

-give individuals and groups a variety of chances, and respect each of the specialities.

-allow individuals to have their composure and spare time.

-be monitored regularly by appropriate internal and external bodies.

-find assessors who could respect positive perspectives on each topic, so that the outcome would not obstruct any potential.

-clarify objectives, methodologies, the role of assessors, feedback process, and

assessment formulae.

-find out a more appropriate way to judge 'quality'.

-respect diversities of each of the HEIs.

-use the current system as a driving force to improve 'quality' of research.

-always consider long-term effects.

-not judge the outcomes of assessment from a single viewpoint and include various perspectives.

6-7 Individual Reaction: The Case of Non-Scientific Department β

PERSONAL EXPERIENCES

A junior member of staff [V] who has been in the department since 1998 has conflicting opinions towards the issue. In general terms, evaluation is necessary to judge one's work that is supposed to seek the truth, and in this sense, V feels that it stands to reason. Conversely, as an individual researcher, V does not wish to have any form of assessment, since V is well aware of the pros and cons of his research, even without being told by others (provided that assessment is conducted on an individual basis). In V's view, once anyone is seriously engaged in her/his work, there is no necessity to advise on that work by others, since each of them has her/his own style and no one should blame her/him in the light of academic freedom. From a pragmatic perspective, former Dean [W] says that "it is no more a matter of 'to take or not to take'", since there is an urgent need to adopt the new arrangement in accordance with the incorporation of all national universities, though he does not like the idea of going with the trend in introducing 'evaluation' in all public services. Present Dean [Z] has taken the current arrangement as a part of existing assessments which have long been conducted by a number of academic societies and institutions, and therefore, "it is not a big deal" as an

individual researcher. A senior member of staff [U] feels that the present system cannot fail to be superficial, judging from the present stage of the whole university reform.

IMPACTS

Though not serious, most interviewees have identified individual impacts as well as some effects on the academic community. **V** points out that since the introduction of evaluation, the numbers of academic societies and research seminars/workshops have been increased, and that is because most researchers wish to add them to their CVs. Besides, the content itself has been affected. According to **V**, some academics tend to write on what the public sensationally reacts to, and in this sense, the present system has distorted the nature of the research community. In a sense, **V** feels that this trend stimulates the motivation of individual academic staff towards research, however, he is doubtful that the quality of their work has been improved along with it. **W** is worried that the present system might have functioned to produce a large amount of low-quality work, since he believes that high-quality research can be done without any systematic form of assessment. In fact, **W** reluctantly acknowledges that some members of staff have changed their research topics in order to curry external favour. Personally, however, **W** has not seen any serious impact on his own research. In **Z**'s case, due to the enormous amount of time they have to spend on managing the present assessment, he has had to cut down on his time for sleeping and private matters, though it has not affected the content of his research as yet.

As for impacts on general relationships among researchers, **U** presumes that the gap between different departments and between HEIs will be increasingly expanded. Internally, **Z** points out that there is a gap in the perception towards assessment between staff and students. In this respect, **U** has heard that students appointed as representatives

for an assessment meeting have complained about their attendance at those activities, due to the complicated procedure involved.

VIEWS ON THE PRESENT MECHANISM

In terms of assessors, **V** wonders how many people can correctly judge one researcher's minute area of study, even when inviting external assessors from various backgrounds. **W** also questions the effectiveness of external assessors, since most members of staff are supposed to meet with those people at conferences and other meetings from time to time, their comments cannot avoid becoming perfunctory. Even overseas assessors tend to adjust their comments to Japanese culture, i.e. not to comment directly and try to look similar to those of other Japanese assessors. More broadly, in terms of correlation of self and external evaluation, **V** perceives that excessive intake of external evaluation might have influenced the original policy of departmental self-evaluation. In this respect, **U** proposes that the department should build up a clear strategy in dealing with any external body and/or individuals.

With regard to assessment formulae, **Z** feels that those adopted in this department are largely confined to quantitative aspects of research: the amount of research money, the number of prizes, the number of papers published in established journals, while neglecting qualitative aspects. **U** stresses that the most important aspect to consider is to what extent the work could ultimately contribute to society, being looked at from both short and long-term views, though he understands that this is pretty difficult to judge. Also, it is pointed out that there is an urgent requirement to distinguish details of assessment for self and external evaluation from those used by the existing research communities, i.e. number of papers, attendance at conferences, presence in particular journals, since those largely overlap with the present arrangement.

Z also suggests that, in the light of the nature of this department, the formulae should also include better treatment of overseas students, in order to see whether or not all of them are satisfied with their lives in Nagoya, in terms of their finances, health, personal matters (visas, work permits etc), not to mention their studies.

W addresses the necessity of more effective feedback, e.g. enclosing a questionnaire at the back of the evaluation reports, since most members of the departmental Self-Evaluation Committee have not gained any useful suggestions for the next assessment after the publication. On the issue of unit of assessment, **V** feels that individual researchers will not take the issue seriously until they are severely assessed by individual proficiency. Under the present system, it is by and large judged on a departmental and/or institutional basis, and that might have discouraged most members from showing interest in assessing themselves as individual researchers.

CURRENT PROBLEMS

The current concerns of those interviewed can mainly be grouped as follows. Firstly, most interviewees address the inappropriateness of the present system. **V** elaborates:

> Among researchers, there are some brilliant people who are able to concentrate on their work that will undoubtedly contribute to society, even without caring much about social changes or any type of evaluation. On the contrary, there are some who are also very good at just focusing on what they like which is not seemingly relevant to the public demand, but they never pay attention to what is happening outside their own worlds at all. What the public wants is to change the attitude of the latter, not to diminish the former. However, the present system has not met this requirement, simply

> because it is not linked to the individual funding allocation, therefore the latter has not been seriously affected as yet. In the light of Japanese culture, it is still going to be difficult to make them redundant, and in the end, those mostly affected are those who are more or less placed in the middle (between the former and the latter). Their research patterns have certainly been affected. However, on the whole, the current system tends to be a sham.

Secondly, the present system is science-oriented, which tends to focus on areas which promise results within a short period of time. **V** explains that the idea of obtaining more financial resources itself is a largely science-driven notion, while neglecting the nature of non-science, referring to a characteristic of the national policy:

> In this country, all initiatives in academic policy are taken by those in scientific fields, and all their focuses centre on scientific research, while non-scientific research merely tends to be regarded as 'lubricating oil' in between.

Thirdly, the lack of academic response is pointed out. **V** is particularly worried about the situation where none of his colleagues have protested against the present reform very seriously, despite the fact that it is a major drastic reform for the first time in the last 50 years. According to **V**, although most senior members of staff experienced the student riots in the 1970s, they have gradually realised that nothing would substantially change by any anti-social movement, and have lost their motivation, while having started to have more commitment to the central reform policy. Meanwhile, young researchers have tended not to have any sense of crisis, and just accept the changes as a fact of life. On the whole, all members of the university staff seem to be indifferent to any changes.

In reality, however, **W** points out that in the present system where substantive time for research and teaching is quite limited, individual members of staff have been forced to adapt to the changes and are being placed under severe pressures. Since the number of full-time administrative staff is limited in this department, most members of academic staff have to be charged with administrative work, while looking after a large number of overseas students.

FUTURE PROSPECTS

V strongly supports the idea that evaluation should work towards improving the quality of all university activities, and not function in the opposite direction, i.e. all research begins to adjust to the system of evaluation. Meanwhile, what **W** hopes for is evaluation to become a benchmark of reallocating all jobs of both academic and administrative staff through a feedback process, since the present management structure is going to become worse and worse, unless it is entirely re-organised. Regarding the issue of re-designation of staff's jobs depending on the outcome of evaluation (teaching-centred or research-centred staff), however, **Z**, as current Head of the department, has received negative responses from a good number of staff, and it is still uncertain whether or not the department could introduce the idea in practice.

ALTERNATIVES

Some suggestions were made for possible alternatives to the present arrangements for evaluation.

The system should:

-clarify the role and meanings of both departmental and institutional self and external

evaluations.

-provide more flexible resource allocation, depending on the need of individual researchers, while abolishing the present system which allocates research money annually regardless of individual needs.

-enhance more collaboration with other HEIs and link departmental evaluation to those activities.

-take into account more internal voices in co-ordinating institutional and departmental evaluations.

6-8 Summary and Observation

Having emerged as a medical school before WW II, Nagoya University has grown steadily, while expanding its provision in a variety of fields, and it has become one of the largest general universities in Japan. Making use of its position as a 'centre of excellence', Nagoya has played a leading role in university research and teaching in Japan, involving a large number of science-based research institutes.

In general, in large-scale universities such as Nagoya, self-evaluation (together with external evaluation in some cases) is conducted both at the institutional and departmental levels, based on its own criteria planned by each of the HEIs as well as by individual departments. Therefore, Nagoya's self-evaluation has been conducted both on an institutional and a disciplinary basis, though up to the third report, the differentiation of the roles of each of the assessments remained rather blurred.

At the institutional level, Nagoya launched its preparations in late 1990, far in advance of the official announcement by the government on the introduction of 'self-monitoring and self-evaluation', having created a preparation committee internally so that it could introduce the change more smoothly. With its own strategy, Nagoya kept

publishing its self-evaluation report at two-yearly intervals from 1993. However, a number of drawbacks appeared, as the system began to settle down, e.g. its perfunctory nature and the indistinctness between 'monitoring' and 'evaluation'. Therefore, after the publication of the third self-evaluation report, the need for altering the form of assessment was strongly felt by most of the staff, especially by the President and members of the Self-Evaluation Committee.

Since then, Nagoya has decided to divorce itself from the way in which those past exercises were conducted, while seriously seeking an alternative. A working group was set up to discuss a new strategy for the fourth self-evaluation, and the issue has been intensively argued until the time of writing. The working group, after heated discussion, formally disclosed its new strategy for the fourth self-evaluation (the so-called 'Academic Plan') on 16th of September 1999, proposing the creation of a new Self-Evaluation Committee and of an External Evaluation Committee, while restructuring the existing system. Thus, from the time of starting its preparation for the fourth self-evaluation report, Nagoya's focus has shifted from merely revealing all of its internal activities to the public to deliberating on the enhancement of Nagoya's own characteristics among all Japanese HEIs. The urgent need for adjusting itself to an incorporated status also prompted this move.

At the departmental level, Departments α and β have taken the issue as a necessary one to respond to, since they were informed that in the near future the outcome of department evaluation would directly affect internal resource allocation. They created a departmental committee for 'self-monitoring and self-evaluation' just after the institutional move, co-ordinated by a member of the academic staff in both departments. Both disciplines have published a few self-evaluation reports since the early 1990s, with later external evaluation reports as well at regular intervals. Towards

the late 1990s, however, there was reflection on their previous exercises, in terms of its contents, methodologies and clear objectives, partly in accordance with the institutional deliberation on a new form of assessment. Thereafter, they have refined their strategies in order to meet the need of the departments as well as external demands. What both departments have in common in their strategies is, for example, to include two overseas assessors in their external reviews, one from Asia and one from Western countries, while also inviting domestic experts from various fields.

At an individual level, while most informants in department α stress the burning need for attracting more funding in conducting any scientific research, some scholars in department β have shown negative views on going with the trend, indicating the inapplicability of science-oriented ideas in non-science. Some scholars also fear that an excessive inclination towards external evaluation might distort their internal strategies and lead to an increase in interference from external bodies.

As for impacts, all interviewees in both disciplines have not directly seen any on their R&T, though they have perceived that some scholars in their research communities have certainly begun to take more interest in others. Though most agree with the idea of evaluation, they have realised that the system has not functioned as it says it has, due to a number of limitations in the rigid settings of Japanese universities. What informants in both disciplines have stressed is the need to preserve this autonomous dignity as a 'university', which has certainly produced its own sense of values, being independent from merely responding to social demands. Most interviewees feel that it is time to consider the degree of their involvement between adjusting to social changes and pursuing their own truths for creating future knowledge.

In terms of departmental autonomy, it had been highly regarded until quite recently in Nagoya. For instance, when it comes to departmental evaluation, it has been

conducted completely in response to internal demands generated within each of the departments. Therefore both institutional and departmental interviewees have not presented any negativity in their comments, though as the central power is increased, it is expected that room for departmental discretion will be dramatically diminished.

On the whole, unfamiliarity was mostly shown in the attitudes of the interviewees towards general issues of assessment, since most of the informants tended to start their comments with an awkward phrase, e.g. "I don't know much about that really..." or "We haven't reached that stage as yet... but I would think... ". Moreover, it has been observed that even the co-ordinators of institutional or departmental self-evaluation have not been able to grasp the overall details of the HE reform in Japan in the wider perspective, due to the lack of time. Consequently, among those who were interviewed, no one has seemingly captured the entire picture of the reform.

It can therefore be suggested both at the institutional and departmental levels that there is an urgent need for establishing a new management section which can focus on all types of evaluation work within Nagoya with sufficient assistance of human and physical resources, while looking ahead to the introduction of a nationwide third party evaluation and the incorporation of national universities.

Chapter 7 Comparative Analysis of the Evaluation of Research in the UK and Japan

7-1 Introduction

This chapter presents a comparative analysis of the systems of research assessment in the UK and Japan, based on the analysis provided in the previous chapters. It offers a comparative analysis at both national and organisational levels from various aspects: in terms of background, the development of the systems, the details of the mechanisms and their impacts. Throughout this chapter, the current systems of research assessment in Britain and Japan are contexualised in wider perspectives, in order to induce general principles regarding the evaluation of research.

7-2 Comparative Analysis of Background Factors

A multitude of factors are concerned with the emergence of a system of assessment. This and the following sections examine this dynamic from various perspectives.

The 1970s were 'a time of economic turbulence' in most industrialized nations, mainly due to changes in oil supplies and prices [Reitan 1997:23-24]. By the end of the 1970s, almost all the finance ministers in the West had encountered tighter financial and public spending restraints, resulting in a rolling back of welfare provision [Harvey & Knight 1996:107]. Since then, most industrial countries have begun to shift their

economic policy, replacing public expenditure by private market payments in order to balance their budgets more efficiently [in't Veld 1991:23], while traditional practices were abandoned or modified in response to these forces. Along with this, as governments began to redefine the frontier of state economic activity, 'efficiency', 'economy' and 'effectiveness' became the espoused objectives of change, and eventually led to the public sector being forced to shift the way in which it was managed. However, there were problems with actual procedures, for example, unlike substantive 'products', it was not so simple to judge the quality of 'service' [Kaneko 1992:35].

Britain and Japan were not exempt from these phenomena, and they underwent similar political and economic changes in the 1980s, though in practice different to some extent, reflecting their own national needs. In the UK, the focus was on the increase in 'productivity'. By the mid-1980s, the British government had perceived that there was a major productivity gap between the UK and the United States, and that they had also been overhauled by other European countries since the 1950s [Thatcher 1995:576]. From the late 1970s, there was 'a shift away from collectivism towards individualism, at least in the economic sphere, with a greater emphasis on monetary and public spending restraint' [Riddell 1991:216] under a new ideological hegemony called the 'New Right' [Gamble 1985:192].

Since the introduction of the market principle to the public sector, there was recognition among government officials that this could not function effectively without a strong steer from the state [Pritchard 1994:264]. This required Thatcher's government to revise its existing ideological doctrine from the 'pure' free-market concept to that of the 'managed' market [Pritchard 1994:264]. It is out of this climate that the notion of 'managerialism' was focused upon in order to compel 'a command economy' on the whole public sector [Harvey & Knight 1996:70]. This involvement of the state in the

market structure is not peculiar to Britain, but is seen in many Western societies [Prichard 1994:263], though in different ways.

The new phenomena can also be explained in association with the emergence of the Evaluative State, which grew out of an analysis of developments of quality assurance, affecting HE and other public services towards the late 1980s [e.g. Neave 1988]. Neave identifies two main discourses in the West:

> Clearly, the Evaluative State emerged from two very different discourses, the one European and political, the other mainly American and economic. And whilst the former tended to predominate in France, Sweden, Belgium and somewhat later, Spain, the latter held sway in the UK and the Netherlands and tended to take root earlier [Neave 1998:271].

According to Neave [1998:271], 'the notion of Evaluative State as a dimension in the *political modernisation* of society is one interpretation which has tended to prevail' in countries included in the former discourse. On the other hand, Neave [1998:271-272] writes that the latter discourse was 'a direct bid to reduce the ambit of the State through deregulation and to substitute in the affairs of higher education the market or the State', and it was 'strangely tinged with technical determinism and sought to bolster its lack of appeal by suggesting 'there was no alternative''.

In Japan, on the other hand, the period of the 1950s-1970s involved a number of rapid social changes: the shift in economic development from manufacture-centred to service-oriented, development of high-tech industry, internationalisation of the economy, liberation of interest rates, and increase in international competency [Kaneko 1994:28]. One of the conspicuous facts for Japan during this period was its expanded position in

the world, especially in the economic sphere, having shifted its attitude 'from acquisition to despatch' [Arimoto 1994:7]. In the 1980s, Japan had taken up the ideology of the 'New Right' under Nakasone's government, which introduced a number of market-oriented strategies in the public sector along with the practice of privatization and de-regulation [Inui 1998:6].

In broader terms, Japan's political discourse during this period can be seen as one example of the worldwide trend towards introducing a market-oriented strategy to the public sector under the 'New Right' ideology. However, its experience had a particular nature; it was largely triggered by domestic demands. Firstly, there was an urgent need to emancipate Japan from US influence which had dominated since WW II [Kitamura 1988:235]. Secondly, the demand came from the nation's leading economic bodies, proposing to fill the gap between what was taken for granted inside Japan and what was required from the outside world. Thirdly, the policy of de-regulation was mostly undertaken by government initiative [Kudomi 1998:58]. It is said that the state of 'de-regulation' in Japan was the product of a compromise between government control and relaxation [Kudomi 1998:60; Ueno 1992:145].

Thus, although Britain and Japan shared the ideology of the 'New Right' in the 1980s, its interpretation in renovating the public service is different, one based on 'managerialism' and the other prompted by government-led 'de-regulation'.

Apart from these socio-economic and socio-political factors, some other elements can also be found. The decades of the 1970s and 1980s saw major societal developments in most industrial countries, which motivated a general quest for better public services by weighing quality standards. In the UK, the changing demographic trend since the 1970s, together with the government's initiatives to improve productivity for efficiency and effectiveness, made the public more critical about state expenditure.

In Japan, the government's focus was on how to renovate its public spending, particularly with regard to the pension system, since the nation was facing a radical increase in expenditure for social services caused by the soaring proportion of the elderly. Thus, in response to impending demographic changes, both nations had had to seek ways to determine public institutions' accountability more efficiently.

7-3 Comparative Analysis of Development of National Policies on the Evaluation of Research

Formerly, public funding of higher education for universities in most countries was subsidised through a block grant which was largely allocated in terms of overhead costs, and 'the authority of professional expertise allowed academics to determine what was offered to students and users of research' [Williams 1999:159]. In the UK, until the mid-1980s, the UGC had been charged with allocating HE funds as a block grant; providing a 'fair' distribution of overheads to cost centres or to services without any close supervision. Similarly, the Japanese government hardly interfered in higher education policy during the 1950-70s, allocating funds depending on the number of academic staff and students (in the case of national universities).

Having faced numerous societal changes since WW II, however, governments in most industrial countries, including the UK, Australia, New Zealand, USA, South Africa, Canada and some European countries, realised that they needed to systematise HE, 'not just in terms of 'soft' concept of the 'learning society', but through its hard-edged capacity to influence economic growth and innovation in the 'knowledge economy'' [Robertson 1998:222]. In other words, it was anticipated that 'HE would need to contribute in measurable terms to the creation of a knowledge society', by generating a suitable return on public investment [Robertson 1999:19]. In the meantime,

with technological change, the move towards globalisation led to governments expanding the provision of science and technology, having placed research 'under pressure from several different directions' [Ziman 1994:12].

It is in this respect that the role of the university was refocused worldwide. There was an emergence of the idea that the university should be a part of public service, and therefore, it would have to prove its responsibilities to be appropriately funded. What had prompted governments to introduce this new arrangement was the severe shortage of funding for science: the innate expansiveness of the scientific enterprise, the increasing technical sophistication and cost of research, and growing demands for demonstrable social benefit. This led to most nations seeking 'to fund HE by 'buying' the outputs and channelling public funds via the students, rather than by subsidising the inputs' [Williams 1999:159]. The trend could also be attributed to government policies which stressed 'the importance of human capital as a decisive factor in international competition' [in't Veld 1991:23]. Thus, there were some commonly occurring preoccupations with quality in most countries, though these similarities might be 'quite superficial' [Woodhouse 1996: 355].

In the UK, there was recognition by the government in the late 1960s that the available research funds from the Research Councils and from the UGC were insufficient to assist all projects in science. Practical implementation took place in the mid-1980s through the introduction of the idea of the rationalisation of science departments, i.e. funding them selectively depending on their performances, so that science and technology should be firmly directed towards areas of high national priority. The same methodology was later applied to all subject areas. Since then, the HE sector in Britain has become increasingly subject to central control.

In Japan, the political discourse towards research assessment derives from two

different streams, one the policy towards science and technology, the other the general HE policy towards academic research. On the scientific side, the effective use of limited resources was stressed in the late 1970s by establishing closer links between the government, academics and industry [Hosoi 1994:23]. The idea of an evaluation system for research was firstly proposed by the Council for Science and Technology in 1984, and it was practised through the implementation of *the National Guideline on the Method of Evaluation for Government R&D* issued in August 1997 as the first guideline for research assessment for the nation's R&D, following the enactment of the Basic Law on Science and Technology (1995). In Japan, the government has begun to maintain R&D with an enormous long-term investment in 'centres of excellence', no matter what benefits are perceived in the short-term.

In terms of general policy towards academic research, the first official recommendation on university assessment appeared in the second report of the Ad-Hoc Education Reform Council (1986). In practice, it was initiated through the de-regulation of the University Establishment Standards in 1991, which recommended each of the HEIs to introduce 'self-monitoring and self-evaluation', that was later followed by the introduction of institutional external evaluation in the mid-1990s and the nationwide third party evaluation in 2000.

Apart from this political discourse, a multitude of factors in society have contributed to the creation of a system of assessment in universities worldwide: the development of technology, internationalisation, the issue of 'who should pay' and the mistrust of the academic profession, though the patterns vary from country to country [Altbach 1989:xx-xxi].

Both the UK and Japanese HEIs have undergone radical demographic changes in their student enrolment rates since the 1980s, though in different ways. Most British

universities saw a rapid growth in the number of students in the process of changing an elite system to a mass system, 'in spite of declines in the cohorts of the traditional age groups participating in HE' [Wagner 1996:8], while the idea of taking students as 'customers' began to be widespread. In contrast, Japan faced a weakening in the overall levels of participation of full-time undergraduate students due to the sharp decrease of the 18-year-population, which led to each of the HEIs seriously reflecting on how to survive the massive competition to gain young entrants by improving quality standards [Amano 1994:3]. In accordance with the increase in public awareness, universities were being expected to play an extensive role, in response to various needs of society [Kaneko 1994:34]. In the case of Japan, there had already been critiques mooted among staff and students regarding the 'out of date' structure of the university system, and therefore drastic reform to improve the quality of all university activities was urgently required.

7-4 Comparative Analysis of Systems of Evaluation at the National Level

This section clarifies the characteristics of the systems of evaluation for research adopted in Britain and Japan at the national level in terms of the following headings which are mostly drawn from the findings presented in the previous chapters:

- BACKGROUNDS: *motives, views on the university, science policy, provision of science, political culture*
- COMPONENTS OF ASSESSMENT: *evaluation bodies, assessors, objects assessed*
- EVALUATION TECHNIQUES: *interaction, forms adopted for research assessment, interval, dominant levels of assessment, styles of assessment, judgement of international quality, feedback, methods of increasing 'objectivity', methods of funding allocation, dissemination*

- UNDERLYING ISSUES: *linkage between research and teaching, applicability of the present system of assessment, validity of applying market values in university settings*

Under each heading, the focus is on an international perspective, carefully recontexualised to allow the appropriate comparison.

BACKGROUNDS

Motives

There are three main objectives which have been considered in both countries: political, bureaucratic and developmental. In the political context, while it was started originally as a means of rationalising science departments, the RAE is currently a method of allocating resources selectively, grading performances of all universities on a departmental basis. In this process, however, it is often criticised because of its over-regulated nature and the uncertainty of the government's underlying intention, i.e. whether or not it intends to produce a few world-class universities. In contrast, the political purpose in Japan includes providing HEIs with better opportunities for autonomous policymaking. However, it is suspected that evaluation might be used as a means of political manipulation by the state, not merely observing academics' activities but controlling the behaviour of individuals, groups or institutions at a distance. In bureaucratic terms, administrators both in the governments and institutions require evaluative data for a variety of purposes. In Britain, all the data presented by each of the HEIs are principally used as the main determinant for research allocation both at the national and organisational levels. In Japan, on the other hand, the bureaucratic purpose tends to centre on disclosing HEIs' internal data to the public through publishing a report to show their 'accountability', while neglecting the aspect of 'evaluation'. Ideally,

institutional evaluation in Japan is also expected to be a tool in dialogue between the government and the HEIs. From the developmental perspective, the purpose of assessment in both nations includes the improvement of the quality of research and of professionalism by appropriate revitalisation of research environments.

Views on the role of the university

Judging from the comments of policymakers in the individual interviews conducted in both countries (along with those illustrated in governments' recent reports), the Japanese informant [**K**] clearly states that, unlike other public services which require immediate gains, the university is a place for creating future values. The UK interviewee (the RAE Manager), on the other hand, takes the view that the university is part of the public sector and does not refer to the intrinsic nature of academic research, despite the fact that the Manager and all his colleagues had experience in working for HEIs.

Science policy

Though the idea of more effective funding for science was shared by both nations, whilst the Japanese government has invested a massive amount of funds in basic science and technology together with associated legislative change, the British government has not shown any willingness to take such a financial initiative. On the contrary, the balance of scientific research funding in the UK since the 1980s 'has shifted relatively from the dominance of government to the dominance of business, with a growing relative contribution from charities and from overseas' [Solesbury 1994:194]. Even the Research Councils have been required to respond to these developments 'in the same way as an industrial R&D function responds to the needs of the business units of

the company' [Collins 1994:7]. Hence, the focus of research in Britain has gradually shifted from basic to 'relevant' research in order to fit national needs [Collins 1994:7]. With regard to this, interviewee **A** commented:

> The big problem as a scientist in the UK is (that) science is not fundamentally valued in society in this country. I think it remains true that to be highly educated in Arts (would be) regarded as socially or culturally good or something, whereas many of those take a pride in not knowing about science.

As one of the factors generating the neglect of basic science, informants **A** and **B** refer to the backgrounds of those at the top of British government which hardly include any from scientific fields. **A** found this "very disturbing", because "They speak the language, (but) they are not listening in a way". **B** elaborates this:

> In Britain, certain people tend to rise to the top of the government piles. They tend not to be scientists. It tends to be people from backgrounds in law, or politics... They don't have backgrounds in science, they don't see from the same point of view. People who run companies as well, major industrial companies tend to have non-scientific backgrounds. In Britain, all tend to have financial backgrounds or legal backgrounds, maybe they don't think in the same way. But at the end of the day, that is why our manufacture bases are not so strong as they were, because they have a different outlook of what is important. I don't exactly know where it is in Japan, but here we always say, "Look at Japan! They are exploiting science... We don't exploit it".

In this respect, there is a parallel view in Japan, as Informant **V** indicates; all major policies on academic research are driven by scientists. In fact, Japanese policymakers

on academic research are mostly selected from scientific fields rather than non-scientific fields. The importance of science and technology is always stressed throughout education, and those who are talented in scientific areas are exploited from an early stage, since there is tacit recognition that that is the only way that Japan can survive in international competition. With regard to this, interviewee **A** implies possible effects on Britain's future development:

> There is very little public acceptance of the need of basic science... what we should do, what we need. I just think... (looking at) science policy in many years, we are not good at guessing what we need next... In the long term, it will have very negative impacts. Britain is a country with a high population and relatively smaller land, so it is going to have to survive on technology... but we don't seem to invest in it.

Judging from these comments, the present arrangement for research assessment in Britain has not practically contributed to the enhancement of the whole environment in science, due to lack of understanding by policymakers, despite the fact that the RAE was originally intended to rationalise and improve scientific provision.

Provision of science

The UK depends very largely for its basic research on the universities [Whiston 1992:54]. In comparison with other European countries, interviewee **A** points out a fundamental difference towards scientific provision in Britain:

> The UK is bit different from any other European country, certainly in scientific research. In many European countries, there is a whole infrastructure of essentially

> scientific civil servants working in research institutes, or in some cases, within university departments, but maybe even not doing any teaching. We don't have that system in the UK, apart from one or two national laboratories, which are largely concerned with providing facilities for universities. Really, the universities are where scientific research is done in the UK. I honestly don't think the government fully understands the difference between the UK and what happens in other countries.

Informant **A** also clarifies the advantages and disadvantages of British approach towards science:

> The bad news about the system we have is that most people working in the university are taken away from research by other responsibilities. I don't know what the truth is, but I suppose that the truth is the most seriously research active people in science undoubtedly spend more than 50% of their time on research, that time is probably more than 40 hours a week, but they do manage a lot more time, but in a research institute, of course, you don't have any structure of disruption. The bad news for a research institute is, of course, that you can promise people a job for life, and they can stagnate, they are still paid and the institute will go downhill, because they just become moribund, (because) you don't have that kind of pressure.

In this sense, Japan's stance is in-between; scientific research is conducted both in universities and private research institutes, and the provision of science in both basic and applied research is respected.

Political culture

In facing the emergence of assessment, there was a clear parallel in political

culture between Britain and Japan. In the UK, the development and use of performance indicators (PIs) has been the product of a highly political process closely tied to notions of economy, efficiency and public accountability [Peters 1992:129], and the country has not encountered any serious obstacles in introducing the notion itself. In contrast, Japan has faced great difficulty in diffusing the notion of assessment in the public sector, since measuring one's performance by ranking is unsuited to the Japanese character. Therefore, the government took account of Japanese cultural characteristics in many respects, e.g. the preference for less self-expression, scepticism of a system merely based on individual competency and great sympathy for humanistic elements. Consequently, the assessment had to be implemented with a style of self-evaluation at the initial stage, leaving its objectivity and link to funding blurred.

This can be more clearly accounted for by referring to the societal expectations towards PIs in each country. According to Sizer, Spee & Bormans [1992:140], performance indicators are used to a widely varying degree in different countries, depending on the political culture, the educational funding system and the quality assessment procedures that determine the optimal allocation of resources in a particular country. According to their survey, in countries such as the UK where social stratification is taken for granted, governments are likely to want to use PIs for comparative judgements, if funding policy is based on formulae. In those countries, there is increasing sophistication in the formulae used in determining the allocations to each institution. Meanwhile, PIs are used for 'monitoring' the system in countries where *equivalence* is notionally respected. Though Japan is not included in their categorisation, Japanese procedures in self and external evaluations both at the institutional and departmental levels would belong to the latter approach, which is less firm and decisive. Informant M gives an explanation of this cultural element, referring

to a characteristic of the British:

> There is a lot of culture in this RAE, a sort of national culture. The British have always had, in quite intellectual terms, an authoritarian tradition. You know, the election to the Royal Society, we always separate the sheep from the goats. It is so natural to us. It is always going back to 'an aristocratic and non-aristocratic system', and it has made it easier to introduce the RAE.

In a way, this kind of 'educational apartheid' has successfully buttressed 'the creaking class structure and quasi-feudal political culture of British society' [Robertson 1999:22]. With this long-standing 'evaluation culture', the UK has been able to introduce a drastic system of evaluation rather more smoothly than any other advanced country. **M** also comments on the possibility of introducing the RAE in other nations:

> In many other European countries, whether or not temperamentally, they would have the greatest difficulty in accustoming themselves to it. If you try the Germans, you see the Germans were terribly anxious about the RAE, I was asked to go and give a speech at Darmstadt about the RAE, and I described all the disadvantages of the non-research universities, and in this group, not anyone was interested. They said, "No!". Of course, it was members of research universities I was talking to, but even so, they have no concept of what it will be like if all research money were withdrawn from other universities. It would be impossible to imagine that you could do it in Germany and in France. You could not do it in Scandinavian countries, and I guess (it would be) quite hard to do it in Japan.

COMPONENTS OF EVALUATION

Evaluation bodies

The main differences between Britain and Japan is that, in the UK, there are meta-level agencies (the FCs) which are responsible both for developing policies and for allocating HE funds, while the role of policymakers in Japan is confined to presenting proposals, and has not intervened in actual implementation. In other words, there is a direct connection between funding and quality in Britain; assessment is a task of the FCs themselves, and therefore, its outcomes are directly subject to the influence of funding allocation. This implies that individual UK institutions as well as individual academics have not been given sufficient opportunities to express their views, as opposed to the government's proposal, apart from those given through the FCs' consultation process within their framework.

From a comparative viewpoint, Boffo, Chave, Kaukonen & Opdal [1999:331] says that, among eight European countries they have observed, 'the link between research evaluation and the allocation of resources to universities is most direct in the UK'. According to them, although research is increasingly evaluated by various internal and external bodies, the financial and other effects of evaluation are less visible in countries such as Germany, Norway, Italy, and Spain, while Britain, Finland and Portugal have a more direct link to allocating research funds.

Assessors

In the UK, 'peer review' is the dominant method adopted in assessment, though as an alternative, greater use of scientometric techniques, which mainly depend on quantitative indicators to measure data to see actual productivity, is also advocated by some scientists [Ziman 1994:15]. Until the 1996 RAE exercise, assessors for each panel were all drawn from senior established figures within the British Isles, not from other

countries. Although from the RAE 2001, it has been recommended to seek views from outside experts if necessary, they are not invited to be 'formal' members of the panel.

In Japan, the backgrounds of assessors vary depending on the case. For 'external evaluation' at institutional and departmental levels, assessors include business, government authorities, the media and overseas institutions of the same discipline, partly reflecting their respect of 'pluralism' in evaluation. Furthermore, the government also considers the way in which public opinions (by normal citizens rather than specialists) can be included [The Academic Committee 1999].

It is, in principle, sensible to select assessors depending on what kind of perspective one would want to include in the judgement, in the light of its objectives. More intrinsically, however, scholars in both countries point out a fundamental question: who knows how to evaluate one's work properly? For instance, informant **A** comments that "it would be impossible to think of any fundamentally better system", considering the speciality of each subject. This leads to a further question: can 'evaluation' be conducted by any human beings?

Objects assessed

In principle, it is important to consider the degree of freedom in assessing one's work so as to ensure that the specific characteristics and objectives of each research project are taken into account, since there is a danger that an assessment can easily be an administrative tool for control. In this sense, it is difficult to consider how to select each object to be assessed, since it may change the direction, pattern and the content of research. However, both countries have not fully recognised this probability, while using a variety of quantitative elements.

In the UK, objects of assessment involve various aspects of research: papers

published, research students and studentships, external research income, research strategy, textual commentary, research structure, staffing policy, working method, evidence of esteem, etc. It is questioned by some informants whether some elements are truly necessary in the light of designated criteria. In Japan, elements of assessment vary depending on the nature of each assessment, but most include all relevant aspects of university activities. In terms of research, most self-evaluation reports cover papers published and/or presented by academics, impact factors, external income sources, people's reputations, e.g. the number of prizes, appearances in the media. However, it is pointed out that most elements are largely confined to quantitative aspects of research.

Thus, there is a tendency in Britain and Japan that only measurable aspects of research tend to be taken into account, while no clear method has been found for measuring 'quality' in either country.

EVALUATION TECHNIQUES

Interaction

In the process of policymaking, some collaboration has been made domestically as well as internationally. At the international level, according to the RAE Manager, the UK tries to learn and exchange ideas with other countries, including Australia, India, China, South Africa, etc. The Japanese government, on the other hand, has examined the system of evaluation adopted in the US, the UK, Netherlands, France and Germany, though its attitude tends to be one-sided. This is mainly because Japan has not been able to abandon its old-fashioned attitude of admiring Western countries as 'models' in all aspects of society, while neglecting its communication with other Asian countries, though some informal discussion with other countries have taken place.

At the national level, in addition to a dialogue with the DFES, the British Funding Councils interact with a variety of different governmental ministries, e.g. the Department of Health, the Department of Trade and Industry, as well as Universities UK (the former CVCP). The Japanese Educational Ministry, on the other hand, has no direct interaction with other governmental ministries partly because of its political nature called *tatewari-gyousei* ('vertical administration') which prevents any 'horizontal' interaction with ministries of other fields. With other HE bodies, the Japanese government has a dialogue with each individual HE body, e.g. the National University Association, the Private University League, in order to seek their views.

Forms adopted for research assessment

It is conspicuous that, while Britain has adopted a single methodology, it is stressed in Japan that the system should take plural forms so that the outcome can be interpreted in various ways.

In the UK, the RAE takes the discipline based framework which divides all kinds of research into 68 subject areas (in the case of the RAE 2001). Since the procedure is highly controlled by central government, the nature of the information submitted by each of the institutions is comparative.

In Japan, on the other hand, various forms of assessments have co-existed: self and external evaluation at the institutional (and in some cases departmental) level(s) and third party evaluation at the national level. In most HEIs, internal self-evaluation is mandated to prepare for external evaluation, and its outcome is implicitly to be linked to decisions on the allocation of internal research funds, though a similar exercise is internally undertaken by some UK institutions. As far as institutional evaluation is concerned, since it is co-ordinated at the discretion of each institution, its nature is

basically non-comparative between HEIs. Meanwhile, the nationwide third party system of assessment which is currently under preparation is, in a way, going to be the first comparative exercise conducted across the nation, which roughly divides all kind of research into 9 areas: Humanities, Education, Law, Economics, Natural Science, Engineering, Agriculture, Medicine and Comprehensive Science.

However, it is questioned by some Japanese academics whether these different systems of evaluation are truly harmonised, as each role and purpose of assessment has not been clearly specified and overlaps to some degree with those taken by existing academic societies.

Interval

In principle, since research intrinsically has a variety of rhythms, 'any attempt to set up an interval cannot fail to interfere seriously with the dynamics of the research cycle into which it is inserted' [Ziman 1994:15].

In practice, intervals have been set in response to the outcome of feedback in the UK; three years for the second and third exercises, four years for the fourth exercise and five years for the fifth exercise. According to the outcomes of interviews at Warwick, the preference for the most appropriate interval varies depending on what kind of research each scholar is engaged in. For instance, in scientific Department X, most interviewees agree with the 4-5 year interval for the RAE, though most of them comment that they have not seriously been affected by the present RAE interval, while expressing some possibility of influence from Research Council funding. Yet, referring to the lack of consideration of the citation process in the RAE, **D**, for example, points out that the RAE's timing is still too early to make a genuine decision, although in non-science, the applicability of citation analysis is questioned by, for example, Field, Lovell,

Sidhu & Weller [1992]. Meanwhile, some informants in Department Y confess that it is quite difficult to set a unified interval in non-science, since the most appropriate interval depends on the work.

In contrast, the interval varies in Japan depending on the institution when it comes to self and external evaluation, though a 2-3 year interval is most widely seen. As for the nationwide third party system, it is stated that it should settle on a 4-5 year interval.

Dominant levels of assessment

At present, research assessment is conducted on a departmental basis in the UK, while Japanese systems are based on both departments and institutions. Although in the process of judgement, individual work is supposed to be considered, what is revealed are departmental grades in the UK, and in Japan a large amount of information about institutional and departmental activities in the form of self-evaluation reports and some overall comments on them by external assessors. With regard to this, Trow [1994:23] doubts the effectiveness of a department-based grading system, since it 'cannot tell much about the actual life of the department as a centre and context for research'. Informant V also indicates that individual researchers will not take the issue seriously until they are severely assessed as individuals, which is then linked to funding.

Style of evaluation (formative vs. summative)

The UK system of assessment stresses the measurement of outputs of individual work, although in the assessment of teaching, recent developments have included in-course or continuous assessment. In Japan, most institutional assessments take a summative form as well, though one specifically designed for R&D considers the

progress of work at different stages by taking a formative approach. This trend to focus on the 'output' partly reflects the idea of the market, which judges the quality of 'products' when they are ready for delivery.

Judgement of international quality

There has been no clear method developed in both nations to determine whether or not research has reached a level that it is internationally excellent.

Britain has been well known for 'producing some of the world's most original research' [Brownstein 1989:7], and in this sense, British research certainly plays a leading role in the world. However, this can also lead to a problem in that the measuring standards tend to be Anglo-centric, and even the RAE Manager admits that "that view certainly has been present". Additionally, in the UK, there is a critical phenomenon as informant C suspects: the panel tends to judge 'international' quality by looking at the titles of the journals in the references only. Yet, according to the Manager, 'international' means worldwide from the FC's viewpoint, therefore their intention is to measure the quality of research in the UK against work conducted elsewhere in the world.

In Japan, this issue is partly overcome by inviting overseas assessors for external evaluation at the disciplinary level. For instance, the departments examined in Nagoya carefully pay attention to including a broader perspective by inviting assessors from other Asian countries as well as from Western countries. This trend is not only seen in Nagoya, but also in some other universities across the nation.

As a partial solution to this uncertainty in judging international quality, it would certainly be possible for the UK to invite overseas experts to be formal members of the panels. Indeed, this has been done in some other European countries: Finland, Norway,

Spain, Germany and Portugal [Boffo, Chave, Kaukonen & Opdal 1999:329]. While explaining his experience in having been invited as an overseas assessor to other countries, informant **A** confesses:

> I think we are very conservative. If I write a paper, I would expect at least one of the referees would be from outside the UK. I would not be surprised if both of them are from outside the UK, as it is an international community. I regularly get applications to review from the Science Foundation in the States or from Austria, Spain, all sort of places, but I think those countries take the view that they do need outside experts.

With regard to this tendency to select assessors from domestic communities only, **A** refers to cultural characteristics:

> There is still terrible arrogance in our government structure in Britain, which takes the view that "We know best". I don't think it is true for the community at our level, but I think it is true in a kind of a political system. You just have to read the way that politicians try to appeal to the popular press in particular, they frequently just make the assertion that "This is the best in the world". Actually, they have not got a clue. They have no idea of what is best. They have no idea of what the systems (are) in any other countries. They just say, "We are the best in the world", and in a certain sense, people would like to hear that to believe it. I think it is dreadful.

This national characteristic of the British is also pointed out by Informant **H**:

> We seem to be starting, to me, too much in the middle of the system we are in. I would like to take more distant views. But Britain doesn't work in that way... You're just

> doing... get rid of everything and start over again, using pure reasons. In Britain, everything is done by aggregation, you have just fiddled with the things in structures... Over-generalisation... might have been done.

In reality, however, the RAE Manager points out that it is not always easy to invite overseas assessors since there might be some areas of research which have a peculiar indigenous nature and there could be a lack of familiarity and understanding within the discipline. There is an issue of the effectiveness of appointing overseas assessors in a system of research assessment which is domestically conducted in a single nation. In this respect, Japan has its own problem in that even nominated overseas assessors tend to adjust their comments to Japanese culture, i.e. not clearly expressing their views.

Feedback

In the UK, after each exercise, the Funding Councils take careful consideration of their conduct and its implications in order to identify whether or not they will repeat the exercise and to reflect on what improvements have been made in the process. They publish a review report in order to ask the public for their comments.

A clear feedback process has not been established in Japan, leaving the question of 'What is it for?' unanswered, though this has begun to be considered in most of the HEIs. What makes Japanese universities reluctant to conduct direct feedback is that there is no redundancy of staff no matter what the results, due to the lifetime employment system which is still dominant in most parts of the Japanese public sector.

Methods of increasing 'objectivity'

The outcome of evaluation cannot fail to be subjective since it is based on the views of those involved. In order to increase objectivity, therefore, it is considered necessary in the UK to take account of the whole range of research outputs, not just traditional academic outputs, but also applied research products. With regard to this, some UK interviewees in Department X suggest more effective use of personal computers so that they can present not only 4 papers but also all other research activities to show their 'productivity'.

In Japan, in order to minimise biased measurements, a number of scholars stress the importance of adopting plural forms of mechanisms for the right practice of assessment.

Methods of funding allocation

Under the present system, it is considered in Britain that research strength should be rewarded with more support, research weakness with less. However, Trow [1994:24] criticises this assumption, suggesting that:

> The question of whether to respond to research weakness with more support or less is properly a decision to be taken in light of a close study of the particular department, faculty or institute and its problems, not by the mechanical operation of a funding formula driven by a research ranking of a department on a scale from 1 to 5*.

Johnston [1994:25] also writes that the widespread introduction of policies of resource concentration around the world are 'found to have been based on little examined assumptions, and in operation to be at times counter-productive'.

In Japan, funding has not been directly linked to research assessment at the time

of writing, though the outcomes of the nationwide system as well as institutional evaluations are expected to be used as a means towards it. In practice, though there is no clear picture of a funding method presented as yet, it is suspected by some Japanese scholars that linking results directly to funding can be easily used for self-willed purposes, aside from the original intention [Hosoi 1994:123].

Dissemination

In Japan, there is a greater degree of difference between the past and the present in disclosing internal information to the public. For example, in the case of Nagoya, a completed report is to be sent to the Ministry of Education, other HEIs, all high schools in the *Chukyou* area, private companies who have accepted a large number of Nagoya's graduates, and some other relevant public and private institutions. In its evaluation reports, Nagoya has made an effort to use plain words rather than technical terms so that they can be understood by anyone who has an interest.

It is true that some interaction with the community exists in most UK universities. However, there is no particular discussion on whether research activities should be accessible to the public, while the main concern of academics tends to be confined to the degree to which each panel's internal information should be disclosed. In this sense, the UK system of assessment is not widely open to ordinary citizens. In other words, 'consumption benefits' are ignored, though it would practically be difficult to include two different discourses in one system, the one purely academic-based which is supposed to be judged by experts and the other very general and available to anybody. This is often criticised as a negative aspect of British performance indicators, which do not attempt to measure objectives such as 'other social benefits', i.e. devaluing the wider civic benefits which flow from the university environment [Pollitt 1990:77].

UNDERLYING ISSUES

Linkage between research and teaching

As shown in the HEFCE's recent Transparency Review, the appropriateness of separate funding for research and teaching is discussed particularly in the UK, and even in the interviews at Warwick, some informants stress "research feeds into teaching", though there is a lack of convincing data.

The linkage between R&T has not widely been discussed in Japan, since the government has taken a holistic approach to all kinds of assessments (except the one for R&D). Yet, being seen to take a 'holistic approach' on the surface, there is no particular discussion which concerns the connection between R&T. Or rather, with regard to R&T, as some informants at Nagoya imply, it is informally debated that evaluation could be a useful tool in designating the most suitable academic job for each member of the staff, though there is no governmental or institutional policy specified as yet. In this sense, some Japanese informants have not taken a negative view on the idea of separating teaching and research.

In any case, it can be suggested that, if a genuine method is created for a holistic approach, there should be an element of assessment which can measure certain linkages between R&T in the progress of one's work, exploring the most appropriate way to prove how both activities are interwoven within a period of evaluation.

Applicability of the present systems of assessment

In both Britain and Japan, the mechanisms of research assessment profoundly originate in science. A number of concerns are raised by interviewees in non-science departments in both countries on the adaptability of the system to non-science in the

light of the nature of knowledge and the way it is produced. With regard to this, even the RAE Manager admits that "it may be inappropriate for a science-based model to be imposed in non-science". Kekäle [2000:484], in an attempt to examine the suitability of approaches of quality assessment in four diverse disciplines (physics, biology, sociology and history), reveals that 'in the soft, rural (divergent) fields it tends to be slower, more uncertain, and the criteria of quality more obscure than in fields like the hard, urban and convergent physics'.

This could lead to a more fundamental question on whether or not a single method can be adaptable across all disciplines. It is pointed out by some interviewees in both nations that the measurement could not be identical between different subject areas, and the most appropriate method should be individually examined in each discipline, in the light of its own nature. Indeed, from the case studies conducted at Warwick and Nagoya, it can be found that each department has its own needs and problems to resolve.

Validity of applying market values in university settings

Several papers from both countries argue the applicability of market-oriented techniques to the judgement of academic value. It is suspected in the UK that over-reliance on market forces in HE is threatening future academic integrity [Berdahl 1990:169]. In Japan, some academics state that, with an assessment system, it is possible to measure 'productivity' to some extent, however, it will never be workable to measure the 'quality' of academic research, since each piece of work is different by nature and has its own value which is not comparable even within the same subject.

7-5 Comparative Analysis of the Systems of Evaluation at the Organisational Level

This section examines the institutional practices of evaluation at Warwick and

Nagoya, in terms of their reactions, management, interactions and institutional and /or departmental autonomy.

REACTION TO THE GOVERNMENT'S PROPOSAL

The general climate of opinion at both Warwick and Nagoya favours the introduction of assessment. As institutions, both universities took the new arrangements seriously from the very beginning, having cautiously prepared for their first assessments. For Warwick, this is because it has a strong management centre that places the gaining of high scores as a priority for the university's development. For Nagoya, it is partly because of a nature of 'national' universities; it has to follow national policies, since the whole administration is largely regulated by central government. There is also tacit agreement among Japanese national universities that the introduction of assessment is inevitable since it is, in a way, intended to be a tool for improving their management techniques towards incorporated status.

At the departmental level, all departments studied in both nations were not particularly interested in general discussions about the principles underlying the issue, rather they have just accepted it as a fact of life whether they like it or not.

At an individual level, among all interviewees in both scientific departments X and α, there was recognition that it is essential for science to have a mechanism to allocate limited funding in an effective way, and in this sense, the introduction of an system of assessment is inevitable. In non-scientific departments Y and β, on the contrary, though most of the informants appreciate the introduction of the system in terms of their relations with the centre of the institution as well as with the central government, they question the necessity of a link to funding, referring to some difficulties in measuring the outcome of non-scientific research within a short period of

time.

MANAGEMENT FOR ASSESSMENT

At the institutional level, the intention of internal management at Warwick has tended to centre on how to read the guidelines strategically so that the university can gain high scores. Its central management is very persuasive in order to produce a reasonable return from each of the departments. In contrast, since the Japanese government has allowed each of the HEIs to determine their own strategy, it is entirely up to Nagoya to consider how to develop its criteria, and its efforts were limited until the publication of the third self-evaluation report.

In the actual implementation of the assessment, the RDSO takes the main role in co-ordination at Warwick, having close contacts with each of the departments. At Nagoya, the co-ordination of institutional self-evaluation is conducted by a Self-Evaluation Committee, which also has intimate interactions with each of the disciplines. The main difference in co-ordination is that the RDSO is organised by management staff only who are able to focus on technical aspects of the issue, while the Self-Evaluation Committee at Nagoya is undertaken by academic staff who are, at the same time, charged with R&T. In addition, while Nagoya's Self-Evaluation Committee is an ad-hoc group which is temporarily created each time, Warwick's RDSO is a stable office which is charged with supporting and developing academic research on a permanent basis. This means that Warwick's managers are able to see the effects of research assessment over a period of time, reflecting their past experiences, while Nagoya's co-ordinators have not been able to conduct sufficient feedback due to the lack of a permanent management for research.

As for feedback, Warwick conducts a scrutiny after each exercise and has made

redundant some of the staff who were unable to perform satisfactorily. No serious attention had been paid to the outcomes by Nagoya until quite recently.

In terms of overall institutional behaviour, it is suggested by some informants at Warwick that the institutional process in resource allocation has not reflected the outcomes of the RAE, being manipulated by the centre. At Nagoya, though under the current system, no transparent procedure is disclosed for institutional resource allocation, some interviewees expect that the outcomes of evaluation would be linked to it more directly in the near future.

With regard to the workload required to prepare for institutional evaluation, Warwick's Managers tend to take it as a fact of life and they have seemingly developed their strategy quite successfully for the RAE. However, there is criticism, for example, as informant E says that the managers lack an understanding of actual academic life, referring to the institutional policy for the 1996 RAE. On the contrary, those who are engaged in management at Nagoya have expressed enormous difficulty in co-ordinating the management under the present conditions, due to the lack of time, technique, and human and physical resources.

From a comparative viewpoint, there arises a question with regard to managing research assessment. Who should be the most appropriate person to manage research assessment? Judging from both cases, one management specialist-based and the other academic-based, any management system for research assessment within the university cannot satisfactorily be controlled, unless managers fully understand both educational values and an institution's management technique in the development of institutional strategies. So far, both countries have not considered provision to specially train these kinds of experts. As the demand for assessment rises in society, the necessity to cultivate 'assessment specialists' of this kind will be soaring, particularly in the case of

Japan.

At the departmental level, across the departments examined, there is a co-ordinator who organises a departmental assessment within the framework, backed by a certain committee or a group which supports her/his job. In terms of workload for co-ordination, since Warwick's departments are strongly backed by the centre, no serious difficulty is expressed for the RAE. At Nagoya, although both Departments α and β have seriously begun to take an initiative in planning their strategies, especially towards the late 1990s, co-ordinators in those departments confess that the amount of work required has already surpassed their physical and mental limitations. Both point out that allocation of the work for this job has been unevenly concentrated on co-ordinators and this has certainly distracted them from devoting themselves to their R&T. Therefore, both co-ordinators at Nagoya stress the necessity for drastic reform of the present departmental management structure, in order to meet current requirements.

In terms of inviting external reviewers, all departments examined in both nations have experience. At Warwick, the idea was centre-driven and conducted in the feedback process to the 1996 exercise with the Vice-Chancellor's support. All assessors invited to Warwick were drawn from senior professors from other UK universities, whereas both departments at Nagoya were more proactive in inviting overseas assessors at their discretion.

Additionally, both Nagoya's departments, particularly Department β, try to include student voices more directly through conducting a questionnaire survey, individual interviews and an invitation to some PhD students to an external review meeting. When it comes to the contents of research, conducted by academic staff, Warwick's departments have not paid sufficient attention to students' perspectives, though this connection is frequently reported worldwide [e.g. Jenkins, Blackman,

Lindsay & Paton-Saltzberg 1998].

INTERACTION

At the institutional level, both Warwick and Nagoya have not paid much attention to how other institutions react, since both institutions are proud of their own strategies. However, with the drastic reform of its recent strategic policy, Nagoya has begun to explore the way in which it can effectively interact with other HEIs in the *Chukyou* Area.

At the departmental level, both Departments X and Y at Warwick have not established any particular links with other institutions in terms of the RAE. In general, however, Department X has a regular meeting every 6 months with three other departments of the same discipline in the Midlands to discuss their research and teaching collaborations, while Department Y looked at the strategies taken by Manchester and the LSE in the RAE 1996 to see if there was anything to learn from them, though Y's attitude here is rather one-sided. At Nagoya, while Department α has a meeting with representatives from departments of the same kind in overseas HEIs, Department β has a regular meeting with other departments of the same subject in other HEIs across Japan.

At an individual level, interaction can vary depending on each individual's research experience and expertise, and its connection with the system of assessment may not be specifically expressed.

INSTITUTIONAL/DEPARTMENTAL AUTONOMY

At the institutional level, although the details of assessment formulae are centrally regulated, autonomy is respected to an extent at Warwick, since it is up to the institution how to interpret the RAE guideline. At Nagoya, institutional autonomy is

respected to a larger degree, since even the decision to take or not to take the government's proposal is principally left with each of the HEIs.

At the departmental level, it is questionable to what extent departmental autonomy is respected at Warwick given the strong control exerted by the university's central management. Although it is stated that 'the strong departmental base' is a dominant characteristic of the university [The University of Warwick 1991:63], its actual power is hardly exercised against the institutional strategy when it comes to the RAE, apart from a little room allowed to consider departmental tactics based on individual disciplinary knowledge, following the panel's criteria. Although some informants in Warwick's departments say that they perceive an amount of independence, it remains within the control of the centre.

At Nagoya, the power of management is dispersed through multiple layers of bureaucracy, and departmental autonomy is highly regarded. For instance, when it comes to departmental evaluation, it is conducted completely at the discretion of each department, being mostly independent from the institutional initiative. However, with the recent increase in central power, it is expected that this autonomy will be gradually diminished in the near future.

7-6 Comparative Analysis of Current Influences at the National Level

The evaluation of research has made a large number of impacts on a variety of HE components both in Britain and Japan. This section examines the most noticeable influences and their implications at the national level.

INCREASE IN GOVERNMENT INTERVENTION

According to Kogan [1988:5], there are two conflicting ways in which HEIs are

being required to become more accountable, by greater central planning and control as seen in the UK, and by the granting of more autonomy and 'self-steering' which will enable and require institutions to be more susceptible to the market and to competition for state aid, as seen in most European countries. Kogan [1998:132-133] says that in the West, whilst a reduction in state controls is obvious in most European countries, 'the UK stands almost alone in Europe in largely travelling in the opposite direction from other nations', taking rationalistic positions on the new public management.

Moreover, due to its direct funding link and centralised nature, the UK system of quality assurance is characterised as a 'more external and bureaucratic system of evaluation' than any other advanced country [Barnett 1996:136]. In this respect, Britain is 'becoming the most centralist and objectives-based system in the West' [Kogan 1988:6].

From an American viewpoint, Trow [1994] points out an absence of serious discussion among British researchers on 'trust' between the state and universities. With the understanding that it is the withdrawal of trust in its universities by the British government that has forced it to create 'managerialism', Trow indicates that external assessment linked to funding is 'a substitute not only for trust between government and universities but also for the effective competitive market' [Trow 1994:15-16].

In Japan, although the government seemingly steps back and promises more autonomy in exchange for allowing HEIs to conduct their own self-evaluation at regular intervals, all the present assessments conducted in each of the HEIs are monitored by remote control through the publication of reports. Thus, it is clear that a move in the direction of self-regulation is accompanied by an opposite move towards increasing accountability. It is suspected by some Japanese academics that, with the introduction of the new third party evaluation, interference by external forces might be strengthened,

making the university environment more vulnerable.

Some UK interviewees, particularly in non-science, point out that it is a 'duty' for academics to find a way of resisting increasing government intervention by being as autonomous as possible. Trow [1994:41] suggests that the only effective resistance by universities against this tendency, is 'to create procedures for review and maintenance of the quality teaching and research which are firmly rooted in the intellectual life of the institution and its academic departments and members'. A similar suggestion is also made by Hosoi [1994:127-128], indicating the possibility of establishing a new university federation which would consist of representatives of the HEIs, taking the role of accreditation and institutional assessment on its own. In reality, however, despite the fact that academic lives have been enormously affected by the introduction of assessment, no serious resistance has been observed in both nations.

IMPACTS ON THE WHOLE HE SECTOR

In the UK, it is indicated by some scholars that the RAE has worked to rationalise the stratification of universities and widen the gap between pre-1992 universities and post-1992 universities. Even the RAE Manager admits that it reinforces different profiles of institutions.

It is still uncertain whether or not Japan will see the same outcome after the implementation of the nation's third party evaluation, although there is recognition among some academics that the government's final objective is to strengthen its bureaucratic control and to reinforce the existing hierarchy among the HEIs.

More essentially, what is feared by policymakers as well as academics in both countries is that, under the present arrangements, there is not enough focus given to the diversity of each of the HEIs, and most of the institutions are becoming identical in their

strategies for assessment, while giving up pursuing their institutional missions.

IMPACTS ON THE ROLES OF THE UNIVERSITY

One of the fundamental defects of the systems of research assessment which both countries have adopted is that there is no particular attempt to consider the university's role in society. In Japan, although there was certainly discussion on what role the university should play in society in the process of policy-making, there is no consideration in the government's reports.

There is a possibility that the university will eventually be compelled to run its affairs in the belief that 'HE is simply another marketable commodity' [Alderman 1996:184], while having re-designated institutional roles within a rather narrowly defined form. For example, the RAE Manager personally comments that it is entirely appropriate that the use of public funds should be subject to proper control and audit. Thus, university autonomy has always been conditional upon the political context [Tapper & Salter 1995:59].

In this respect, Trow [1994:25] draws attention to the fact that the state has not realised that universities differ from most other areas of the public services in that much power is inherently exercised by the academics at the 'bottom' of the chain of authority and that what those universities provide is 'enormously diverse'. The distinct character of the university within the public service is also stressed in Japan by some academics, indicating that society should realise that the role of the university is not merely responding to societal needs, but creating future values, and the latter often goes beyond the limit of existing systems of assessment which can mechanically measure [Ikoma 1999:20-21].

It is therefore envisaged that it is time for the university, including academics as

well as institutional managers, to clarify its appropriate role in society. Indeed, under the present conditions, it is unrealistic to reject all public expectations, considering all of the factors affecting the dynamic towards the emergence of assessment. Therefore, the university has to reconsider to what extent it can go with the times, while maintaining academic intrinsic values from both short and long-term perspectives. This would require academics to view their work from the perspective of external interests in order to evaluate and explain it, while also seeking to educate (or re-educate) external groups about the unique contributions of HE to a changing society [Schuller 1995:89]. The university could argue that a further period of financial stringency would constrain its capacity to undertake effective teaching and research and its ability to respond to the changing needs of society.

7-7 Comparative Analysis of Current Influences at the Organisational Level

This section explores the present impact of evaluation at the organisational level.

With the introduction of the new arrangements for quality assurance, organisational culture is being required to shift towards more effective management to a greater degree. What will be most seriously affected in the end is, above all, individual researchers, while managers who co-ordinate assessments will gradually get accustomed to them as a fact of life, though co-ordinators seem to be mostly affected at the initial stage. This is because it is the academic who will eventually produce the substantial outputs which are to be assessed.

As an example of the impact on institutional management, it is indicated by informant **M** that the RAE has become a prime factor in managers' thinking, since its outcomes have a direct linkage in obtaining QR funds allocated by the government.

Most institutional managers are, therefore - willingly or unwillingly - involved in the academic transfer market, i.e. trying to hire researchers before an appropriate deadline. Some interviewees indicate this by referring to "much more rapid turnover of staff", though it has also meant that a good number of staff took voluntary redundancy due to their low performances.

On the other hand, the impacts on each individual reported vary to a large degree, depending on the individual stance on being 'academics' and their perspectives on the government's reform. In terms of research content, two issues are mainly and repeatedly discussed. First, those at the edge of the discipline or on the border of different subject areas might be neglected, given that the system takes a disciplinary approach. This is widely criticised in the UK, while less so in Japan. Second, there is a tendency in both countries that those having more immediate attention from central governments and/or from the public are more favourably assessed. With regard to the latter, Harris elaborates:

> The current assessment movement is often initiated from ministries and state agencies rather than from the academy. Economics of productivity, scientific and technological development, and a competent work force usually demand more immediate attention from national governments than do artistic, spiritual, and social matters. Inevitably, therefore, governments focus on educational indicators related to economics... Assessment, then, often measures that which is easiest to quantify, most objective or least subjective, less value-driven, and of most immediate interest to sponsoring governments [1991:158].

According to Harris, Europeans are 'seemingly more interested than Americans in

assessing the relevance of universities to national economies' [Harris 1991:172].

In a way, this trend stimulates the motivation of academics towards research, giving them an opportunity to consider how effective their research would be in terms of socio-economic benefits. In the long run, however, it might lead to narrowness in the potential research scope which could have been explored by academics in the future, not to mention the deterioration of academic freedom. In short, the system could become a hindrance to the healthy development of academic research.

With regard to research patterns, some UK informants have addressed a clear difference in managing their time, indicating that there is a greater need to keep up a level of research output than there was in the past, although some informants insist that purely academic purposes should always come first regardless of the conduct of assessment. In Japan, it is also pointed out by informant **V** that since the introduction of evaluation, the number of academic societies and research seminars/workshops has been increased, since most researchers wish to add to their 'proved' outputs on their CVs. According to Ziman [1994:21], 'excessive emphasis on commercial competition of this kind undermines the spirit that motivates people to take part in these activities, or transforms it into a strictly self-centred desire to make a personal profit out of them'.

In terms of intervals, it is particularly criticised in Japan that the system unnecessarily functions to appraise one's ability at irrelevant times. Meanwhile, what is obviously seen in the UK by standardising the interval for all subject areas is issues such as the emergence of 'short-termism', a tendency to 'rush into publishing' and an increase in premature publications. Consequently, both UK and Japanese interviewees have pointed out that the present system might lead to a lowering of academic standards.

As for the effects on individual mentalities, a number of negative impacts are reported particularly from UK academics across the country, though some informants

express positive comments, e.g. 'team-spirit' is enhanced within the department. What is mainly found in both Departments X and Y is that the present system might lead people to become more insular, while discouraging inter-university co-operation. Moreover, it is pointed out that since the RAE tends to value research active staff more highly than those who are less research active, the latter could be 'isolated' within the department. Regarding relationships with assessors, it is indicated by interviewees in both nations that, since the system involves external reviewers who are drawn from experts of the same field, there are always some possibilities for some scholars to readjust their research to the favouritism of external assessors. In short, the system has created new tensions between individuals, departments, institutions and beyond [Shinbori 1992:31], transforming the way people care about each other. Consequently, supportive relationships among academics might be or have been compromised.

7-8 Summary and Observation

The context for the emergence of evaluation in Britain and Japan was similar in some respects. For example, since the 1980s, both countries have experienced a shift in their economic polices, leading public services to be more managed in order to increase efficiency under the new ideological hegemony called the New Right. This was accelerated by increased public awareness together with demographic change.

At the same time, there were also differences. While the introduction of quality assurance in the public sector in Britain has been largely related to the government's urgent policy to recover from the nation's economic decline, Japan's intention involved several different elements, e.g. the emancipation from the American influence, the demands from the economic bodies and more efficient services in the public sector through 'de-regulation'.

In the HE sector, universities in most industrial countries have had to play an extensive role since the end of the 1970s, in response to various needs of society. In the UK, there has been the introduction of a system of research assessment largely related to scientific demands, due to financial constraints. In Japan, the introduction of research assessment was partly associated with the nation's science policy, with the legislative changes in the mid-1990s, while the quest for evaluation in the universities was also proposed in the general policy towards academic research, resulting in the introduction of institutional (self and external) evaluation. In the case of the latter, the introduction of assessment was also triggered by internal dissatisfaction with the previous system.

The details of the systems in Britain and Japan and their implications can be summarised as follows:

COMPARISON AT THE NATIONAL LEVEL

- *Motives:* The political purpose of evaluation in both countries is that all the data presented by each of the HEIs are used as the main determinant for research allocation both at the national and organisational levels. In Japan, the political purpose also involves providing better opportunities for autonomous policymaking. The bureaucratic purpose implies an increase in administrative control by the government in both cases. The developmental purpose in both nations includes the improvement of the quality of research and of professionalism by an appropriate revitalisation of the research environment.
- *Views of policymakers:* As far as those interviewed in this study are concerned, they have different views with regard to the role of the university; the Japanese interviewee states that, unlike other public services which require immediate gains, the university is a place for creating future values, while the UK interviewee takes the view that the

university is part of the public sector.

- *Science policy*: Though the idea of more effective funding for science was shared by both nations, the approach towards science in Britain is different from that in Japan. While the Japanese government invests in science and technology as the nation's priority, the dominance in British science research has shifted from the government to business. As some British informants indicate, this gap is also reflected in issues of scientific provision.
- *Political culture:* While British national culture, which takes the social stratification for granted, has been able to apply the RAE without any serious confusion, it is envisaged that it would be very difficult to apply the same system in countries such as Japan, which are more sceptical about numerical ranking and/or a direct link to funding.
- *Evaluation bodies:* There are meta-level agencies (FCs) in Britain which are responsible both for developing policies and for allocating HE funds, resulting in the direct link between quality assurance and funding. In Japan the role of policymakers is confined to presenting proposals.
- *Assessors:* Peer review is dominant in Britain in the assessment conducted by the Funding Councils, while in Japan the backgrounds of assessors vary depending on the case.
- *Objects assessed:* There is a tendency in Britain and Japan that only measurable aspects of research are taken into account, while discussion on measuring 'quality' has not progressed far in either country.
- *Interaction:* At the international level, some exchanges exist in both nations, though in Japan the approach tends to be one-sided. At the national level, British Funding Councils keep in communication with a few other ministries, whilst Japan has no

direct interaction with other ministries, though they have a dialogue with each individual HE body.

- *Forms adopted for research assessment:* A single methodology is adopted in the UK, while the Japanese government stresses the importance of plural forms of assessment.
- *Interval:* It is commonly agreed that 4-5 years is more or less the best interval, though these views are mainly expressed by scientists in both cases.
- *Dominant level of assessment:* Both systems conduct evaluation on an institutional and/or departmental basis. The value of individual work is not directly reflected in the outcomes of assessment.
- *Styles of assessment*: A summative approach is dominant in both countries.
- *Judgement of international quality:* Neither nation has reached a clear conclusion, though using overseas assessors is adopted in most industrial nations.
- *Feedback:* Some feedback is available in Britain. This had been lacking in Japan until quite recently.
- *Methods of increasing 'objectivity'*: In Japan, it is frequently repeated that adopting plural forms of assessment would reduce assessors' biases, while the British system tries to take account of the whole range of academic outputs.
- *Methods of funding allocation:* The assumption that 'research strength should be rewarded with more support' is questioned by some academics.
- *Dissemination:* The main difference between Britain and Japan lies in the degree of consideration of public awareness.
- *Linkage between research and teaching*: This is frequently discussed in the UK, but there is not sufficient data to prove it as yet. Meanwhile, no serious concern has been expressed by Japanese interviewees.
- *Applicability of the present systems of assessment*: This is particularly questioned by

non-scientists, and some academics suggest a differentiation of the system depending on the discipline and/or research areas.

- *Validity of applying market values to judge quality in university settings:* This is questioned in both nations.
- *Increase in government intervention:* It is reported that there is greater autonomy in policymaking in Japan and in most European countries, while government intervention is increasing in the UK.
- *Impacts on the whole HE sector:* In the UK, it is argued that the current system might work to rationalise the stratification of universities and widen the gap between pre-1992 universities and post-1992 universities, while the impact on the HEIs is still uncertain in Japan. What is feared by policymakers as well as academics in both countries is that under the present systems, there is not enough focus given to the diversity of each HEI, and most institutions are becoming identical in their strategies for assessment, while giving up pursuing their specific institutional missions.
- *Impacts on the roles of the university:* There is no particular attempt to consider the university's role in society, although some academics indicate that the university is different from other public services in terms of pursuing future values.

COMPARISON AT THE ORGANISATIONAL LEVEL

- *Reactions:* These vary depending on the level. At the institutional level, Warwick and Nagoya favour the introduction of assessment, having cautiously prepared for it. At the departmental level, all the departments examined just accept it as a fact of life whether they like it or not. At an individual level, most informants in scientific departments X and α show recognition that it is essential to have a mechanism for selective funding, while some interviewees in non-scientific departments Y and β

question the necessity of a link to funding.

- *Management:* At the institutional level, the main difference in management is that, while Warwick has a permanent office to provide service for academic research, Nagoya does not have any division which can concentrate on academic work, resulting in confusion over the appropriate management for university assessment. There is also difference in the degree of central control. Warwick's departments are strongly controlled by the centre, while Nagoya's departments have a large degree of autonomy in considering their own assessments.
- *Uncertainty of institutional behaviours:* There is criticism of internal resource allocation both at Warwick and Nagoya.
- *Co-ordinators:* At the institutional level, Warwick has strength in its institutional management, i.e. having a permanent office for research backed by a sufficient number of general staff. At the departmental level, even though co-ordination of research assessment is undertaken by academic staff in each discipline at Warwick, they are strongly backed by the centre. Meanwhile, Nagoya's co-ordinators, both at the institutional and departmental levels, complain about the workload required for evaluation. A question is raised here on who should be the most appropriate person to conduct research assessment.
- *Inviting external examiners:* Both institutions have experience, though Nagoya is more proactive in inviting overseas assessors. Meanwhile, students' views on staff's research activities are not sought at Warwick, while Nagoya has some regard for them.
- *Interaction:* Warwick and Nagoya have not paid much attention to how other institutions react to evaluation. At the departmental level, however, some attempts have been made both domestically and internationally. At an individual level, interaction varies depending on individual experience and expertise.

- *Autonomy:* At the institutional level, autonomy is respected to some extent at Warwick in terms of the interpretation of the RAE guideline, while it is largely left with the institution in Japan. At the departmental level, it is questioned how much Warwick's departments are allowed to have a degree of autonomy, whilst it is highly respected at Nagoya. However, it is expected that the centre at Nagoya will have more power in the future.
- *Organisational culture:* Changes in this will be required in order to shift towards more effective management in both nations.
- *Impacts on institutional management*: Research is more of a priority in managers' thinking, and most are involved in the academic transfer market which has encouraged more academics to move to institutions with higher profiles.
- *Impacts on individuals:* Effects vary depending on the individual stance regarding the term 'academic'.
- *Research contents:* The present approach is questioned in terms of appropriateness for interdisciplinary research and there is also a tendency that those associated with national priority are more highly assessed. In the long run, this might lead to narrowness in the potential research scope.
- *Research pattern:* Some informants perceive a clear difference in managing their time in Britain, while it is reported in Japan that the number of academic societies and research seminars has been increased.
- *Interval:* There is a criticism in Japan that the system of research assessment might work to appraise one's ability unnecessarily, while British discussion has touched on issues such as the emergence of short-termism, a tendency to rush into publishing and an increase in premature publications. As a result, UK and Japanese interviewees indicate that the present system might lead to a lowering of academic standards.

- *Effects on individual mentalities:* While some informants express the view that team-spirit is encouraged in the UK, others point out that the present system might lead people to become more inward-looking and lacking in inter-university co-operation. As a result, those who are less research active tend to be isolated within the department. With regard to relationships with assessors, it is reported in both countries that there are possibilities for some researchers to readjust their research to gain favour from assessors. In short, the systems have created new tensions between individuals, departments, institutions and beyond, resulting in diminishing supportive relationships among academics.

Chapter 8 Conclusion

8-1 Summary of This Research

This study explores the effectiveness of the present systems of evaluation for research in the UK and Japan, based on in-depth consideration of the factors behind the emergence of evaluation, political developments, policymaker's views, academic debates and institutional reactions in both nations. As an example of a response to the government's initiative, one case study in each country is undertaken, Warwick University in Britain and Nagoya University in Japan. Each case is analysed at three levels: institutional, departmental and individual. Some elements of the systems are then recontexualised in a comparative perspective, involving the analysis of background factors, development of the systems, details of the mechanisms and their impacts. The following is a brief summary of this research.

DEVELOPMENT OF RESEARCH ASSESSMENT

Among a multitude of factors affecting the emergence of the quest for quality assurance, those arising from political discourse are undoubtedly major forces of influence.

By the end of the 1970s, almost all industrial nations had encountered tighter financial and public spending restraints. Since then, most countries have begun to shift economic policy to balance their budgets more efficiently, while traditional practices including welfare provision were abandoned or modified in response to numerous social

changes. This led to the public sector facing a number of complex challenges to change the way in which it was managed.

Britain and Japan underwent similar political and economic changes in the 1980s, though practically different to an extent, reflecting their own national needs. They shared the ideology of the 'New Right' throughout the 1980s. Yet, their interpretations for renovating the public services were different, one based on 'managerialism' and the other prompted by government-led 'de-regulation'.

With regard to HE provision, until the mid-1980s, the UGC had been charged with allocating funds as a block grant in the UK. Similarly, the Japanese government had hardly interfered in higher education policy during the 1950-70s. Towards the end of the 1980s, however, it began to be anticipated in both nations that HE would need to generate a suitable return on public investment in measurable terms.

Above all, with the technological innovation, what had prompted governments in Britain and Japan was the severe shortage of funding for science. In the UK, it is out of this climate that a system of research assessment emerged in order to rationalise science departments by selective funding. In Japan, alongside scientific demands, the relaxation of the University Establishment Standards in 1991 also encouraged HEIs to introduce 'self-monitoring and self-evaluation', which was later followed by the introduction of institutional external evaluation and the nationwide third party evaluation.

In facing the new dynamics and the emergence of assessment, however, there was a clear parallel in political culture between Britain and Japan. In the UK, the development and use of performance indicators (PIs) has been the product of a highly political process closely tied to notions of economy, and the country introduced the idea without serious difficulties. In contrast, Japan faced problems in diffusing the notion of

assessment in the public sector to some extent, due to its national characteristics.

Apart from political influences, some other factors can be observed. Firstly, in accordance with the increase of public awareness, the HE sector was being expected to play an extensive role, in response to various needs of society. Second, with impending demographic changes, both nations had had to seek ways to determine public institutions' accountability more efficiently by improving quality standards. Thirdly, in bureaucratic terms, administrators both in the governments and institutions had wanted evaluative data for a variety of purposes, e.g. a main determinant for research money allocation both at the national and organisational levels.

DETAILS OF MECHANISMS

At the national level, a different approach can be seen in terms of forms adopted, assessors, objects assessed, interval, style of evaluation, methods of increasing 'objectivity', feedback, etc.

In the UK, the RAE takes the discipline-based framework which divides all kinds of research into 68 subject areas (in the case of the RAE 2001). Its procedure is highly controlled by central government. In Japan, on the other hand, various forms of assessments have co-existed, self and external evaluation at the institutional (and in some cases departmental) level(s) and the third party evaluation at the national level. As to intervals, it is envisaged that it would be extremely hard to set the most appropriate interval for any assessment, since research intrinsically has a variety of rhythms. Moreover, it is pointed out that the 'timing' of judgement could be reconsidered in the light of the citation process.

In terms of assessment, 'peer review' is the dominant method adopted in the UK. Until the 1996 RAE exercise, assessors for each panel were drawn from senior

established figures within the British Isles, not from other countries. In Japan, the backgrounds of assessors vary. For 'external evaluation' at the institutional and departmental levels, assessors are invited from a variety of fields, including business, government authorities, the media and overseas institutions of the same discipline. Additionally, while Nagoya's departments try to include student voices more directly for a useful reference, Warwick's departments have not considered students' perspectives on staff's research so seriously.

The main forms adopted take a summative approach in both nations, except for the one for science in Japan which takes a formative approach. This trend to focus on the 'output' of the product partly reflects the idea of the market, which judges the quality of 'products' when they are ready for delivery. There is a tendency in Britain and Japan that only measurable aspects of research tend to be taken into account.

Moreover, there has been no clear method which has been developed in both nations to determine whether or not research has reached a level that is internationally excellent. There is no agreed solution to overcome this issue, other than inviting overseas assessors, though Britain does not seem so keen to take this initiative. More fundamentally, however, it is questioned whether or not 'evaluation' can be conducted objectively by any human beings.

It is argued that the outcome of evaluation cannot fail to be subjective since it is based on the views of those involved. In order to increase objectivity, therefore, it is considered necessary in the UK to take account of the whole range of research outputs, not just traditional academic outputs, but also applied research products. In Japan, on the other hand, in order to minimise biased measurements, a number of scholars stress the importance of adopting plural forms of assessment.

With regard to methods of funding allocation, it is considered in Britain that

'research strength should be rewarded with more support, research weakness with less'. However, it is reported that the widespread introduction of policies of resource concentration around the world is found to have been based on a limited number of assumptions, and to be at times counter-productive. Although the funding link remains a blur in Japan at the time of writing, it is expected that the government will take a similar approach to that currently adopted in the UK in the near future.

Other aspects include considerations of the linkage between R&T, applicability of the present systems of assessment, validity of applying market values in university settings and equity.

At the institutional level, both Warwick and Nagoya took the new arrangements seriously from the very beginning. For Warwick, this was because it has a strong management centre that places gaining high scores as a priority for the university's development. For Nagoya, it was partly because of the nature of 'national' universities. At the departmental level, all of the departments studied have tended to accept research assessment as a fact of life whether they like it or not. At an individual level, among all interviewees in both scientific departments X and α, there is tacit recognition that the introduction of a system of assessment is inevitable, considering the limited funding resource available. On the contrary, in non-scientific departments Y and β, though most of the informants admit the necessity of research assessment, they also question the necessity of the link to funding. Interviewees in both non-scientific departments have pointed to the uncertainty of their government's final objectives for introducing a new system in non-science.

In terms of the management of research assessment at the institutional level, the chief difference in co-ordination between Warwick and Nagoya is that the former is mainly organised by management staff who are able to focus on this job, while the latter

is mainly undertaken by academic staff who are, at the same time, charged with R&T. From a comparative viewpoint, any management system for research assessment within the university cannot satisfactorily be controlled unless managers fully understand both educational values and an institution's management technique. In this respect, both countries have not developed provision to specially train experts of this kinds. As for feedback, while Warwick conducts a careful scrutiny after each exercise, no serious attention had been paid to the outcomes by Nagoya until quite recently.

At the departmental level, across the departments examined, there is a co-ordinator who organises the departmental assessment within the framework, backed by a certain committee or a group which supports her/his role. With regard to workload for co-ordination, since Warwick's departments are strongly backed by the centre, no serious difficulty is expressed for the RAE. At Nagoya, both departments' co-ordinators stress a strong necessity for drastic reform of the present departmental management structure, in order to meet current requirements.

INFLUENCES AND IMPACTS

The evaluation of research has made a large impact on a variety of HE components: relationship with the state, the nature of the HE sector, organisational management, institutional/departmental autonomy, the nature of research and individual mentalities.

At the national level, it is indicated that there are two conflicting ways in which HEIs are being required to become more accountable, by greater central planning and control as seen in the UK, and by the granting of more autonomy and 'self-steering' as seen in most European countries and in Japan. Due to its direct funding link and centralised nature, the UK system of quality assurance is characterised as a 'more

external and bureaucratic system of evaluation' than any other advanced country. In Japan, the government seemingly steps back and promises more autonomy in exchange for allowing HEIs to conduct their own self-evaluation at regular intervals.

As an impact on the whole HE sector, it is pointed out by some scholars in the UK that the RAE has worked to reinforce the stratification of universities and widen the gap between pre-1992 universities and post-1992 universities. It is still uncertain whether or not Japan will see the same outcome after the implementation of the nation's third party evaluation, although there is recognition among some academics that the government's final objective is to strengthen its bureaucratic control and to reinforce the existing hierarchy among the HEIs. Additionally, what is feared by policymakers as well as academics in both countries is that there is not enough focus given to the diversity of each of the HEIs, and most of the institutions are becoming identical in their strategies for assessment, while giving up pursuing their institutional missions.

At the organisational level, through the introduction of quality assurance, organisational culture is being required to shift towards more effective management to a greater degree. As an example of the impact on institutional management in the UK, it is indicated that the RAE has become a prime factor in managers' thinking, since its outcomes have a direct linkage in obtaining QR funds.

The impact on each individual researcher varies, depending on their individual stance on being 'academics' and their perspectives on the government's reform. In terms of research content, neglect of interdisciplinary work and the increase of economic-based studies are pointed out. With regard to research patterns, some UK informants have reported that there is a greater need to keep up a level of research output than there was in the past. In Japan, it is indicated that since the introduction of evaluation, the number of academic societies and research seminars/workshops has been

increased. As for intervals, by standardising the period of assessment for all subject areas, it is a criticism in Japan that the system functions to appraise one's ability at irrelevant times. On the other hand, what is seen in the UK involves issues such as the emergence of 'short-termism', a tendency to 'rush into publishing' and an increase in premature publications. As a result, it is pointed out that the present system might lead to a lowering of academic standards. Moreover, concerning the effects on individual mentalities, the system has created new tensions between individuals, departments, institutions and beyond, transforming the way people care about each other. Consequently, mutual supportive relationships among academics might be or have been discouraged. Yet, it is also commonly seen that, despite the fact that academic lives have been affected enormously by the introduction of assessment, no serious resistance has been observed in the UK and Japan.

With regard to university autonomy, although details of assessment formulae are centrally regulated, institutional autonomy is respected to an extent at Warwick, since it is up to the institution as to how to interpret the rule. At Nagoya, institutional autonomy is respected to a larger degree, since even the decision to respond to the government's proposal is principally left with each of the HEIs. At the departmental level, it is questionable to what extent departmental autonomy is respected at Warwick given the strong control of the university's central management. At Nagoya, the power of management is dispersed through multiple layers of bureaucracy, and departmental autonomy is highly regarded.

8-2 Recommendations for the UK and Japan

As indicated in previous chapters, each country has its own characteristics in adopting the most appropriate form of assessment, reflecting its political, social and

cultural contexts. This implies that 'national level politics very much define why evaluation systems will be introduced and how evaluation systems should work' [Cowen 1996:vii]. Nevertheless, the two countries examined in this study have produced useful suggestions for an improved system. This section, therefore, gives some recommendations for an improved system of research assessment for each country.

The findings in previous chapters imply that the system of research assessment in the UK has had a number of negative effects on academic environments as a whole, while the system of university evaluation in Japan is still in the preparatory stage and has not experienced any serious problems. Therefore, the following descriptions are more detailed for the UK, while less is suggested for Japan.

RECOMMENDATIONS FOR AN IMPROVED SYSTEM OF RESEARCH ASSESSMENT FOR THE UK

The system of research assessment has undoubtedly posed a grave challenge to the legitimacy of authority in the UK academic community. There is a possibility that Britain might fail to obtain all the excellence it expects from researchers and institutions because of its inadequate system of research assessment, and that could be catastrophic for the future enhancement of UK higher education.

In these circumstances, Britain should realise that, in comparison with equivalent systems adopted in most other industrial countries, it has a highly regulated system of assessment controlled by central government (via the FCs) which is not based on the 'collegial ethos' but mainly on the notion of 'managerialism' originating in market strategies. As reported in various contexts, over-competition for resources may actually be counter-productive in its effects on performance. It might be suggested that Britain could find a way in which those who are involved are not over-regulated by the

system, allowing individuals to have more spare time. Above all, it is most important for all those involved to understand that evaluation is a secondary, supportive activity, not an end in itself, hence it should always try to reduce anything that is counter-productive.

More serious discussion should be focused on the future shape of the UK higher education sector, both in theory and practice, by all of those who are involved in HE, since most of the present debates within the nation tend to focus on details, whilst largely neglecting the fundamentals.

The UK could take one of two options for its future; one is to maintain the RAE system while refining its methodology, the other is to develop an alternative. If Britain retains the RAE, it should reconsider the methodology in order to achieve appropriate purposes, while trying to avoid any unintended outcomes and/or adverse effects. The following three aspects may be key points for possible modifications of the existing methodology.

FAIRNESS

• *Provide equal opportunity*

Under the present system, the invisible hierarchy has been reinforced as the nation repeats the same practices, while the lower-ranked universities at the bottom will never be able to reach the top. Therefore, in starting an exercise in a new round, it would be preferable if the system could give an equal chance to all institutions which are involved in more explicit ways, no matter what kind of results they received at previous exercises or no matter how large individual departments are.

• *Allocate more money at the bottom*

In order to achieve the above, the method of funding allocation could be modified so that

those universities which are placed at the bottom can maintain their research activities, given the minimum QR money which is at least manageable for conducting any research activity, whereas the sum for those at the top is slightly reduced.

- *Reconsider the role of panel members*

Once someone is nominated as an assessor in a panel, her/his workload in the institution to which s/he belongs should be reduced so that s/he can spend more time on this job, and if required, visit other panels to comment on her/his perspectives. At the same time, it is also be important to find an appropriate method so that their positions do not influence the rating of the institutions/departments to which they belong.

- *Reflect on the judgements at a later stage*

After each exercise, the FCs as well as each institution should have a time to rethink the judgements given by the RAE, and also to reconsider the appropriateness of their feedback at regular intervals, to see whether or not their strategies are genuinely preferable in a longer-term view.

TRANSPARENCY

- *Streamline the guidelines*

The FCs should try to establish more concrete targets. This would allow the system to examine what is truly required for judgement and what is not. This would, hopefully, resolve the confusion among academics on the elements to be assessed.

- *Clarify the standard of the judgement*

Although there are designated criteria established by each panel, it is questioned by some academics whether the panel's judgement is purely based on these, since there is no need for panels to produce any evidence of their deliberation process under the current system. It would be useful to reveal individual comments expressed by each of

the assessors in the process of generating an outcome.

• *Gain consensus on the rules among academics*

A panel's criteria and benchmarks for judgement could be more clearly presented and agreed by all of those who are concerned so that there would be no 'hidden criteria' behind the formal procedure. At the same time, considering any negative effects caused by disclosure, it is recommended that the panels discuss to what degree and in what sense they should reveal details to those who are assessed.

• *Conduct an audit on the outcomes*

Under the current system, once the money is distributed by the FCs, it is then entirely up to the institution as to how to allocate QR money to each of the departments. However, as some informants indicate, the RAE tends to function merely to increase the whole amount of institutional revenue, while it has not seriously affected the institutional resource allocation, regardless of the fact that each department makes an effort to improve its rating. Hence, it would be more effective if the system contained an audit in a feedback process by the FCs to prove that the outcomes of an RAE have reflected on each institution's resource allocation to individual disciplines, while respecting institutional autonomy. It would be very important to maintain healthy communications between institutions, departments and individuals.

DIVERSITY

• *Diversify the panels*

Considering the present variations between the panels, each of the panels' procedure should not necessarily be identical across all disciplines. Although there are slight differences depending on the panel under the current system, this could be more flexibly and widely adopted depending on the nature of each discipline.

• *Include more assessors*

Ideally, in the light of the divergence of academic research, the system could increase the number of assessors in one panel to two or three times larger than that at present, depending on the need of each subject. In judging each piece of work, a small panel would then be created by a group of people whose interests are close to or at least relevant to her/his topic. Members of the small panel could principally be selected from nominated assessors in the main panel. However, if nobody is deemed appropriate among the panel, the small panel can invite other experts from outside. This will enlarge the capacity of the panel's judgement, as well as clarify the role of each individual assessor.

• *Take various viewpoints*

Including various perspectives would increase the degree of equity and objectivity. Inviting overseas assessors as well as young and/or junior researchers to the panels can widen their present scope, while reducing biased and partial views. Non-academic views including those of students and ordinary citizens could also be helpful.

• *Consider flexible intervals*

Greater flexibility could be shown in considering the most appropriate timing to judge individual work in order to identify those requiring a longer time-span. This could also take the citation process more seriously, waiting for genuine outcomes of the work.

• *Maintain institutional diversity*

Each of the institutions could be allowed to take careful determination of which tasks are appropriate to their general goals and which are not, in the light of their own missions.

On the contrary, if Britain takes an alternative approach to assessment, the following may be suggested:

The first alternative is the designation of a group of universities as research universities by the government as once suggested in the ABRC report (1987), dividing institutions by type: research university (R), teaching university (T) and mixed university (X), in order to fund them accordingly. Before introducing this idea, however, the government would need to clarify its final goal, i.e. how many research universities the nation would need to maintain its future. Yet, this proposal would have to be treated with careful consideration, since it could lead to the collapse of the research potential of those who are currently working for teaching-oriented institutions. Also, attention should be paid to negative impacts on teaching, since research-centred institutions might neglect the belief that "research does feed into teaching", which is often argued by British academics.

Secondly, there is an obvious limitation in the UK in that it is the Funding Councils themselves which are responsible for assessing the quality of research, and therefore, prioritising cost-effectiveness is inescapable. Under the current system, it is quite hard for academics to reject or protest against the system, since it is ultimately their source of income. In order to increase the room for academics to reconsider the system, it might be possible to establish a new third party body for research assessment, which is totally independent of central government, funding councils or academic institutions. The new organisation could be responsible for creating a feasible methodology to allocate all QR money in the most appropriate way, considering the view of both the government and academics. If this was done, the role of the Funding Councils could then be confined to delivering QR-funds only, in accordance with the outcome of the assessment conducted by the new independent body.

Lastly, as a costly but effective option, adopting a scale which is principally based on the value of each individual work as much as it possibly can be. This will

require the transference of the level of assessment from a department base to an individual base. This could be organised by either the FCs or a new independent body, and assessors could be selected to measure individual research projects independently, and each work would then be funded in accordance with their individual results in the absolute judgement.

As lessons from Japan, the UK could, first of all, learn about respecting the humanistic aspects of research, i.e. having pluralistic viewpoints to reduce biased judgements and taking *positive* perspectives towards any kind of research by allowing individuals to retain their composure so that the system does not suppress all hopes which one might potentially have. Secondly, as a dominant level of assessment, Britain could seek a way to judge research ability at the institutional level by, for example, measuring institutional management techniques for research: efficiency of the management procedure, enhancement of international collaboration and contribution to society. All these elements could be judged in the light of institutional mission statements so that the diversification of HEIs is maintained. Thirdly, Britain could learn how to include more student voices in the process.

SOME LESSONS FOR WARWICK

Across the whole institution, there seem to be some contradictory perspectives in the present management style at Warwick between the centre and individual academics.

Under the present structure, most interviewees are sceptical about institutional behaviour, having stated that their views have not been reflected in institutional policy-making. In this respect, the university might need to consider how to enhance better interaction by clarifying the different roles of the centre and of the academics in

institutional accountability. It is important for the centre to realise that it is only academics who deeply understand their disciplinary knowledge and its future directions, and that the centre should not infringe academic freedom by over-regulating departments by use of its managerial power. Moreover, in the process of institutional policy-making, Warwick could include more student voices in discussions on the improvement of research, which has largely been neglected so far.

Judging from the present university strategy, Warwick's institutional attention tends to merely centre on generating external income, apart from the fundamental discussion on how to enhance its original role as a university. With regard to the RAE, the institutional focus is mainly on maximising the chances of each department, while ignoring the discussion on the improvement of quality of research across the disciplines. The university could reflect on this shortsighted perspective and pay serious consideration to creating 'future knowledge' as a HE institution in respect of its long-term well-being.

As a first step, the centre could present clear details of the discussion process on the institutional judgement on internal resource allocation to each discipline, reflecting the RAE scores for each of the departments. If managers have their own criteria in resource allocation that do not match the outcomes of the assessment, they could account for them so that they would gain consensus from individual academics.

As a lesson from Nagoya, Warwick could respect departmental autonomy more, allowing each of the disciplines to show a sufficient amount of deference in determining its own strategy towards assessment, even though it would be within the limit of the whole institutional policy. It could also learn how the university can pursue institutional originality in research, i.e. in what kind of research Warwick only can contribute to and how it can be achieved. In this sense, the institution could reconsider the role of the

Vice-Chancellor and/or Registrar, allowing them to take genuine leadership in enhancing institutional autonomy and conduct a serious review of values, purposes and future scenarios for Warwick as a leading research institution in the whole framework of UK higher education.

RECOMMENDATIONS FOR AN IMPROVED SYSTEM OF RESEARCH ASSESSMENT FOR JAPAN

At the national level, the nation, first of all, should reconsider its long-standing attitude to 'admiring Western originated ideas' in policy-making, no matter how effective those would be in Japan, and it could seek more originality.

With regard to the present arrangement, it should specify more distinguishable targets for each of the systems of assessment by clarifying the roles and characteristics of each system. Since Japan has chosen to allow plural evaluation systems to co-exist in the whole HE sector, it will have to pursue the most appropriate harmonisation of these assessments. At the same time, the nation should also consider the establishment of an organisation to provide training for 'assessment specialists' who could have sufficient knowledge of both academic values and managerial techniques, in order to improve the management structure in each of the HEIs more efficiently.

In terms of methodology, it is important to reflect on the applicability of the same rules in all research areas, whilst exploring ways to generate separate purposes and strategies for non-scientific research. As for assessment formulae, details should be determined by the individual purposes of each assessment, avoiding unnecessary overlaps. Considering the nature of Japanese culture and of the academic world, any assessment adopted should remain semi-structured so that it would not obstruct any existing relationships.

At the organisational level, each of the HEIs should realise that the nationwide third party evaluation will affect the institutional initiative in the near future. In this respect, it could be suggested that each of the HEIs should reflect on the necessity of conducting existing institutional self-evaluation (and in some cases, external evaluation as well) more seriously, within the parameters of an appropriate relationship with the government. Each of the HEIs should realise that this institutional evaluation would have the possibility of not only becoming a 'driving force' to improve internal activities, but also a means of protecting institutional autonomy as well as coping with any 'excessive' control of the government. In order to achieve the latter, it is vital to consider how original each of the institutional evaluations is, making the most of the discretion given by the government. It is envisaged that it would largely be up to their individual abilities as to how effective their internal evaluation can work. What is required of each of the institutions is to evolve through meaningful evaluations. At the same time, each department as well as each individual should consider the way in which they would not lose their original role in seeking truth and in creating a sense of future value.

Lastly, as lessons from the UK, Japan should learn how it could conduct an appropriate feedback. In practical terms, the UK experience should also give a useful hint in developing electronic instruments more effectively in assessments in order to reduce the amount of paperwork and unnecessary publications, e.g. developing appropriate electronic software for evaluation. With regard to the issue of whether or not the results of assessment should be linked to staff promotion and/or redundancy, as seen in the UK, cautious deliberation should be undertaken in the light of Japanese culture, though it would certainly be a way to shift the staff's rigid consciousness towards evaluation.

SOME LESSONS FOR NAGOYA

At the institutional level, apart from the existing management structure, the university could create an independent management section such as 'the Centre for Evaluation' which can entirely focus its job on all types of evaluation work, backed by sufficient assistance from human and physical resources. It should be co-ordinated by specialists who are able to discuss and elaborate methodologies towards the most appropriate evaluation for Nagoya. In addition to its general work for institutional self and external evaluations, it would be expected that the new centre would consider institutional strategies towards the introduction of a nationwide third party evaluation and towards the incorporation of national universities within the whole picture of this large-scale HE reform without losing Nagoya's own objectives and mission statements. With this new centre, Nagoya could, first of all, clarify the role and meanings of both departmental and institutional evaluations, taking into account more internal voices generated by academics, general staff and students. If outcomes are used as a means of institutional resource allocation, it should make the whole procedure of assessment as transparent as possible, considering the needs and nature of individual departments and researchers.

As some informants indicate, the results of institutional evaluation could be used as a benchmark for reallocating the jobs of academic staff, so that the present confusion in management at all levels can be partly resolved. This would involve the re-designation of their jobs depending on the outcome of evaluation (teaching-centred or research-centred staff). However, this idea should be cautiously treated, since there is no agreement on whether or not the institution could separate teaching from research, depending on the individual traits of academics.

At the departmental level, if the present departmental evaluation remains, it is strongly recommended to reshape the present management structure within each discipline so that the whole workload is not concentrated on an individual co-ordinator, as seen in the case study. For this, there is a need for each department to employ a good number of specialists who understand the nature of the discipline and appropriate management techniques, though it would be extraordinarily difficult to find these kinds of figures under the present conditions.

As an alternative, the institution could also consider the possibility of integrating the present departmental evaluations into the whole institutional evaluation so that it could streamline the overall institutional management. At the same time, in order to preserve the present degree of discretion given by the centre, each department could seek extended discussion with other departments of the same discipline across and beyond the nation so that departmental autonomy would not be infringed by central power.

As a lesson from Warwick, Nagoya could learn how more effective management can be conducted within the centre of the university, by establishing appropriate sections which specifically deal with research management.

8-3 Limitations of This Research

There are, of course, some aspects which this research has not been able to cover.

At the national level, due to the limited number of interviewees, i.e. one person in each country, it was difficult to judge government's perspectives through the interview, since the contents of the interviews were influenced by their personal views.

At the institutional level, using Warwick and Nagoya for case studies, the

research has not been able to cover all the issues raised on and around the topic, since both institutions are highly ranked, relatively positive towards the central government's policy and have performed fairly well in their research, and therefore have not encountered any serious problems raised by those in other lower-ranked institutions. In the UK, it is obvious that Warwick is one of the finest examples when it comes to the RAE. Hence, it would be difficult to illustrate most serious cases, e.g. redundancy, protests, which are reported nationwide. In Japan, national universities including Nagoya have currently encountered a particular event, i.e. incorporation, and therefore, some of the issues raised by the interviewees at Nagoya originate in their specific situation which have not been experienced by, for example, private universities which are the largest HE providers in Japan. In addition, even among national universities, Nagoya has benefited from its former imperial university's status in terms of funding and physical resources, and therefore, its specific position must be considered.

At the departmental level, examples are taken from one science and one non-science. However, as indicated in this study, it is hypothesised that each subject would require its own approach, and in this respect, it would be difficult to standardise the most appropriate system of assessment even in the same faculty (science, social science, or humanities). This implies that using one department only from each field is not sufficient to prove this assumption. In addition, since this research anonymised the contents of interviews, it could not include some of the useful comments expressed by informants which particularly referred to their subject areas, although those were important in understanding the overall discussion within each of the disciplines.

At an individual level, due to the limited number of interviewees, it is still difficult to generalise their views, though these problems are covered to an extent by articles which have appeared in newspapers, journals and other information sources.

Since the study attempts to include all the issues surrounding the topic in both Britain and Japan, it could not discuss individual issues in detail, resulting in a brief sketch of some debates. Also, the substantial similarities and differences between research assessment and teaching assessment have not been covered.

As indicated in Chapter 2, this research was conducted by one researcher who does not have a bicultural background, and therefore, it cannot entirely avoid making observations from one particular perspective, though every effort has been made to overcome this. In addition to understanding of the cultural differences, there is a need to consider how the researcher's 'personal characteristics and status might affect' relationships with individual interviewees in the case studies [Bogdan & Biklen 1998:84]. In this sense, there is a possibility that the interviewer is not seen just as a 'researcher', but also as a 'student' of the same institution, which might have affected the contents of the interviews.

Lastly, encountered in most research activities, 'within a social organisation, activities may vary with time', and one has to 'consider the time dimension in all field situations' [Burgess 1982:76], although handling this is 'a constant challenge' [Bechhofer and Paterson 2000:113]. This means that the time the case studies were conducted at Warwick and Nagoya might have affected 'the nature of the data' collected [Bogdan & Biklen 1998:61]. Hence, there is a possibility that what is argued in this study will be out of date within a short period of time. Namely, in Britain, there is an argument whether or not the RAE should be abolished. In Japan, just before the incorporation of all national universities, it is predicted that the situation will dramatically change within a few years, i.e. the introduction of funding linked to the outcomes of assessment.

8-4 Suggestions for Further Research

Considering these limitations, the following suggestions can be made for the enhancement of this research.

Firstly, the study could include more perspectives. At the national level, more varied views could be obtained by conducting more interviews with other government officials. For example, in the UK, an interview could be conducted with someone in the RAE team other than the RAE Manager, as well as with the HE Minister in the DFES. In Japan, an interview could be undertaken not only with those who are on the Academic Committee, but also with those who are on the University Committee and those who are on the Council of Science and Technology. Other than policymakers, the study could also examine the views of representatives of HE bodies, e.g. Universities UK (the former CVCP) in Britain and the Private University League in Japan. At the institutional level, more varied types of institutions could be explored, including teaching-oriented institutions. In the UK, for instance, examples could include institutions that have existed for more than a century, as well as post-1992 institutions. In Japan, the study could involve the experiences of other national universities, private universities, local universities and junior colleges. At the departmental level, more departments could be selected to explore whether the most appropriate method for research assessment should differ depending on the discipline (or more intrinsically, depending on the type of individual research). This would also enable the identification of 'slight differences' between each of the subject areas within the same faculty field. For instance, there would be subtle gaps of understanding regarding the issue between those in Chemistry and those in Engineering. Also, with the permission of those who are interviewed, revealing the name of the departments examined could clarify the nature of the disciplines and their particular needs more clearly. Lastly, at an individual level, more

views could be obtained.

Additionally, research could investigate views of assessors, students and ordinary citizens outside the HEIs, and contexualise their comments from various perspectives. Furthermore, research could also be conducted with those who were involved in the system of evaluation in the past, so that the current picture of the system could be more distinctly drawn, in the light of its historical development in each country.

Secondly, research could explore more countries in other parts of the world, so that the cases of Britain and Japan could be more explicitly identified in a global perspective. For example, as a few interviewees suggested, the British system could be compared with the system of France and that of Germany, particularly in terms of science policy. Similarly, the Japanese system could be compared with the situation in neighbouring countries, e.g. Korea, China and Thailand. Multi-national analysis could also elucidate general principles of research assessment more comprehensively: what has to be done and what should be avoided. However, since the idea would far exceed the capacity of one lone researcher based in one nation in terms of language and culture which are needed to understand the whole situation, it would be preferable to create a multi-national team before conducting such large-scale work.

Thirdly, whilst exploring the possibilities for expanding the research scope, the study could narrow down its focus. For instance, in association with the system of research assessment, the thesis could centre on science policy and scientific research, the changing role of the university, government intervention and university autonomy, methodologies or impacts.

Fourthly, in research of this kind, if one wants to discuss the topic across all disciplines, it would essentially require the co-operation of those who are in various fields, both within and beyond the academic world, since the study of evaluation is

fundamentally interdisciplinary in nature. It would be quite difficult to understand the discussion entirely in each of the subject areas unless one is seriously involved, and therefore, in order to understand the overall discussions undertaken in each of the academic fields thoroughly, it would be helpful if more than one researcher from a variety of fields could be engaged in the process. Otherwise, any research of this kind cannot fail to be one-sided and/or one-disciplinary based. For instance, the research would require at least one researcher from humanities, one from social science and one from natural science to argue the idea of 'research'. Beyond the academic world, for instance, the research could involve managers within HEIs, focusing on better management of the system of research assessment.

Fifthly, as indicated by several interviewees in the case studies, it is difficult to separate research assessment from teaching assessment, as long as both activities are related to each other by nature and most academics are supposed to be assessed by both measurements. Although the system adopted for research is different from that for teaching in the UK, there are a number of common issues. Therefore, if they are treated separately, it should be clarified what can be concluded in common from both types of assessments and what is not. More comprehensive research could cover both assessments and explore how they relate to each other.

Lastly, reflecting on all the issues which arise from this study, there is a need to conduct a study on 'evaluation' itself from a more comprehensive viewpoint, i.e. purpose, criteria, meaning, methodology, effective management, possible impacts for all subject areas. Under the current circumstances, the study of evaluation is partly conducted in various fields across the different disciplines, both in science and non-science. The outcomes of these kinds of research have tended to be scattered, and each of them has only appealed to those who are in the same field. Therefore, it is

recommended that there is a need to be engaged in research that would continuously focus on this evaluation issue, gathering information from all disciplinary areas. Research of this kind could always be updated through a well-balanced feedback process so that it optimises the various evaluation methods and finds out the most appropriate methodology depending on the nature of research.

8-5 Concluding Remarks

Notwithstanding these suggestions, what this research has revealed is that evaluation intrinsically is an unseen but extremely powerful instrument. It has the dynamic force to be able to alter the original nature of all of those involved. When it is applied to academic research in the university, therefore, its effects could be immeasurable, not only in terms of the nature of academic research, but also regarding the whole HE sector and beyond. Hence, it should be treated with prudent deliberation before implementation. Looking at the current systems of research assessment in the UK and Japan, while they have tried to develop suitable mechanisms in the light of their objectives, they eventually produced a number of unintended effects. In this sense, both nations have not yet been successful in establishing machinery which can judge quality appropriately, mainly because they have not, as yet, fully understood the nature of evaluation.

It is therefore envisaged that more serious consideration of the nature of 'evaluation' and its implications to research will be required before developing further the present systems adopted in both countries, backed by sufficient studies on 'evaluation'.

It would be a daunting task for all of those concerned to deliberate on this issue more gravely in the current circumstances within which HE functions, but it would seem

to be thoroughly worthwhile for the future of higher education both in the UK and Japan.

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